

FIG. 1 is a block diagram of a multimedia system 10. The system includes a multimedia server 12, a multimedia source 24, and a plurality of channels 36. The multimedia source 24 is connected to the multimedia server 12 via a satellite connection, cable connection, antenna connection, etc. The multimedia server 12 is connected to a plurality of client modules 14, 16, 18, 20, 22, 26, 30, 32, 34, 36. The client modules 14, 16, 18, 20, 22, 26, 30, 32, 34, 36 are connected to the multimedia server 12 via a network 36. The client modules 14, 16, 18, 20, 22, 26, 30, 32, 34, 36 are connected to the multimedia server 12 via a network 36.

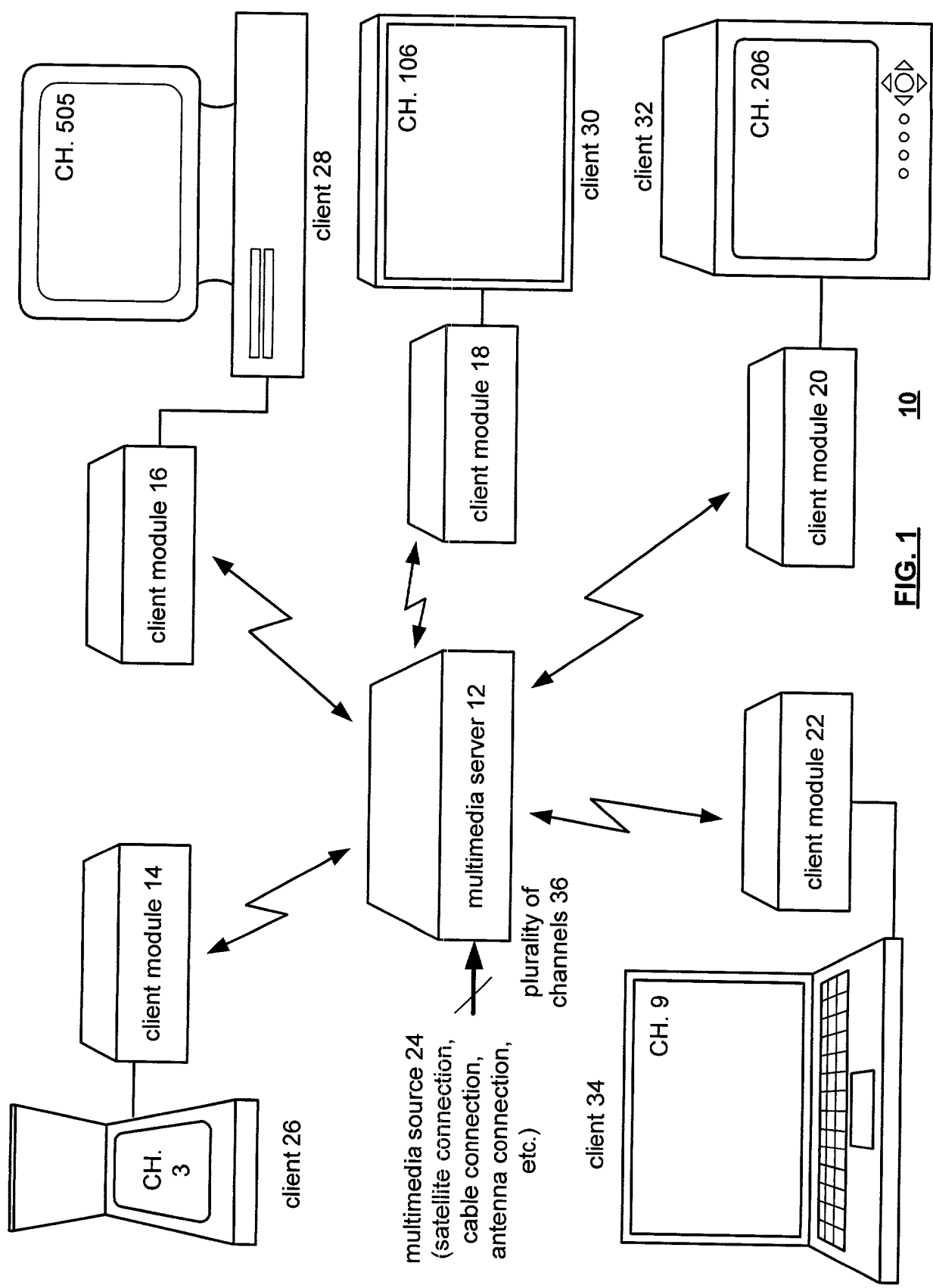
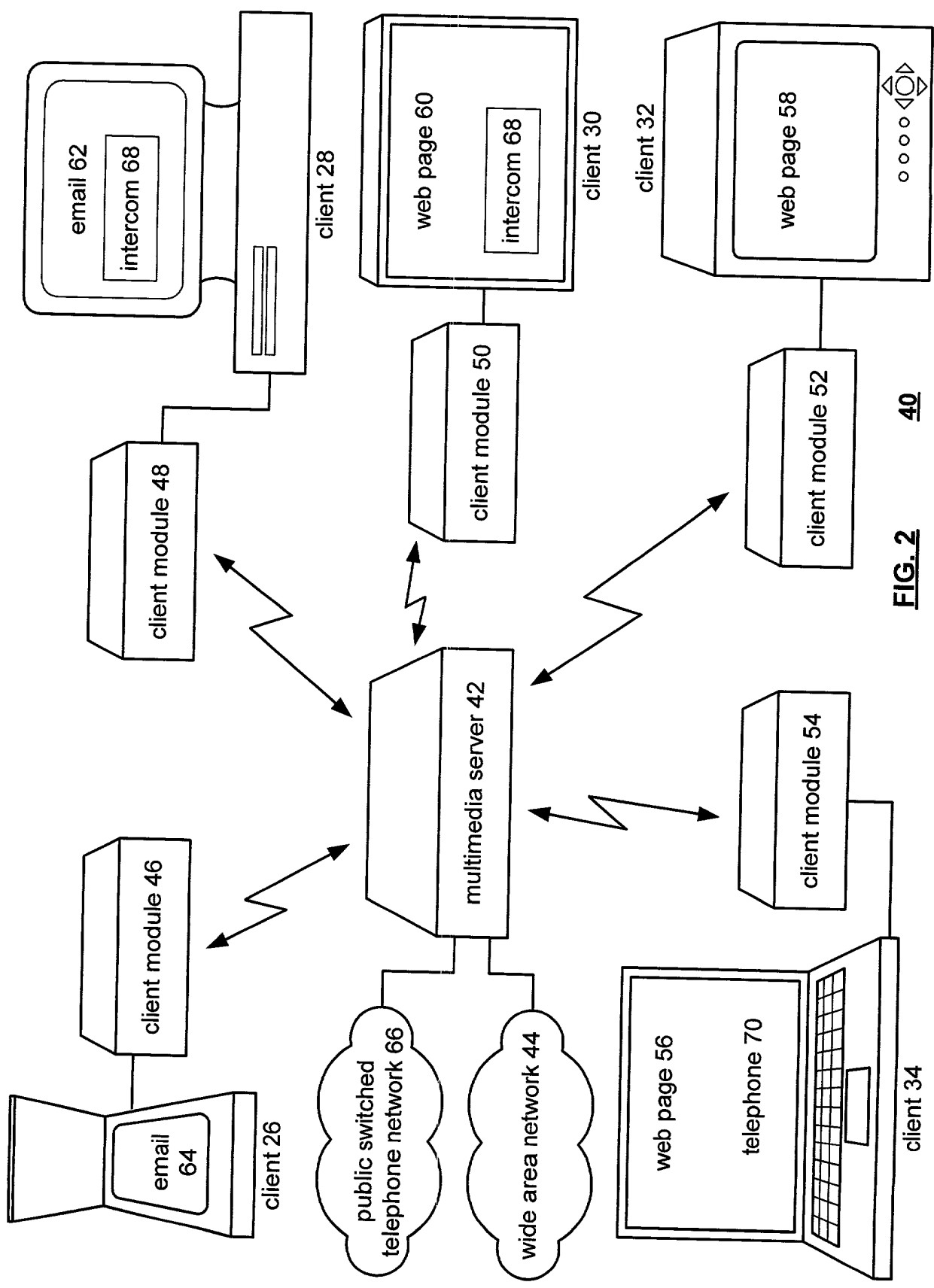
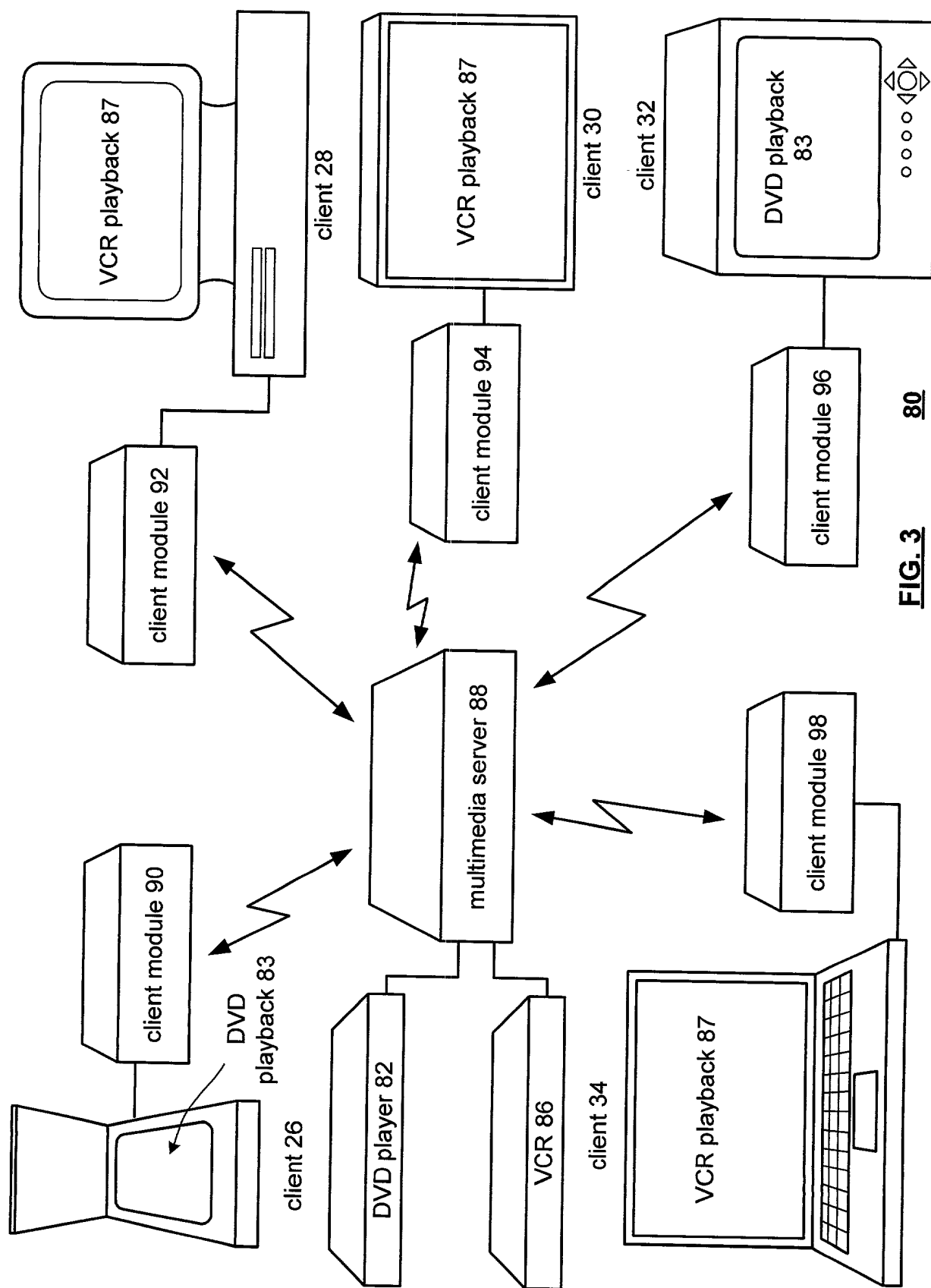


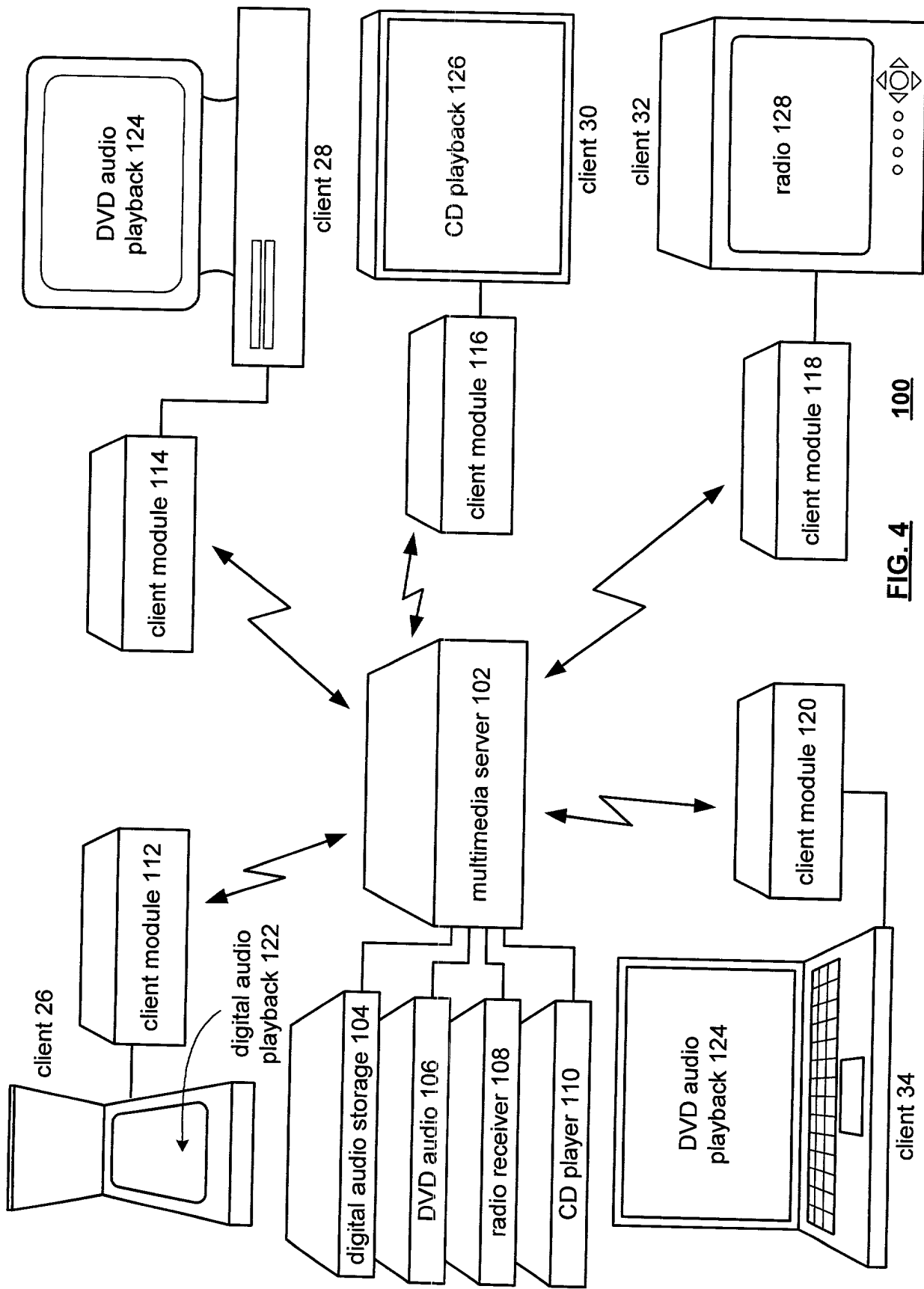
FIG. 2 is a block diagram of a multimedia server system 40. The system includes a multimedia server 42 connected to a public switched telephone network 66 and a wide area network 44. The server 42 is also connected to several client modules: client module 46 (with email 64), client module 48 (with email 62 and intercom 68), client module 50 (with web page 60 and intercom 68), client module 52 (with web page 58), and client module 54. Client 26 is connected to client module 46. Client 28 is connected to client module 48. Client 30 is connected to client module 50. Client 32 is connected to client module 52. Client 34 is connected to client module 54 and includes a web page 56 and a telephone 70. Bidirectional arrows indicate communication between the server 42 and the client modules. The networks 44 and 66 are shown as clouds.



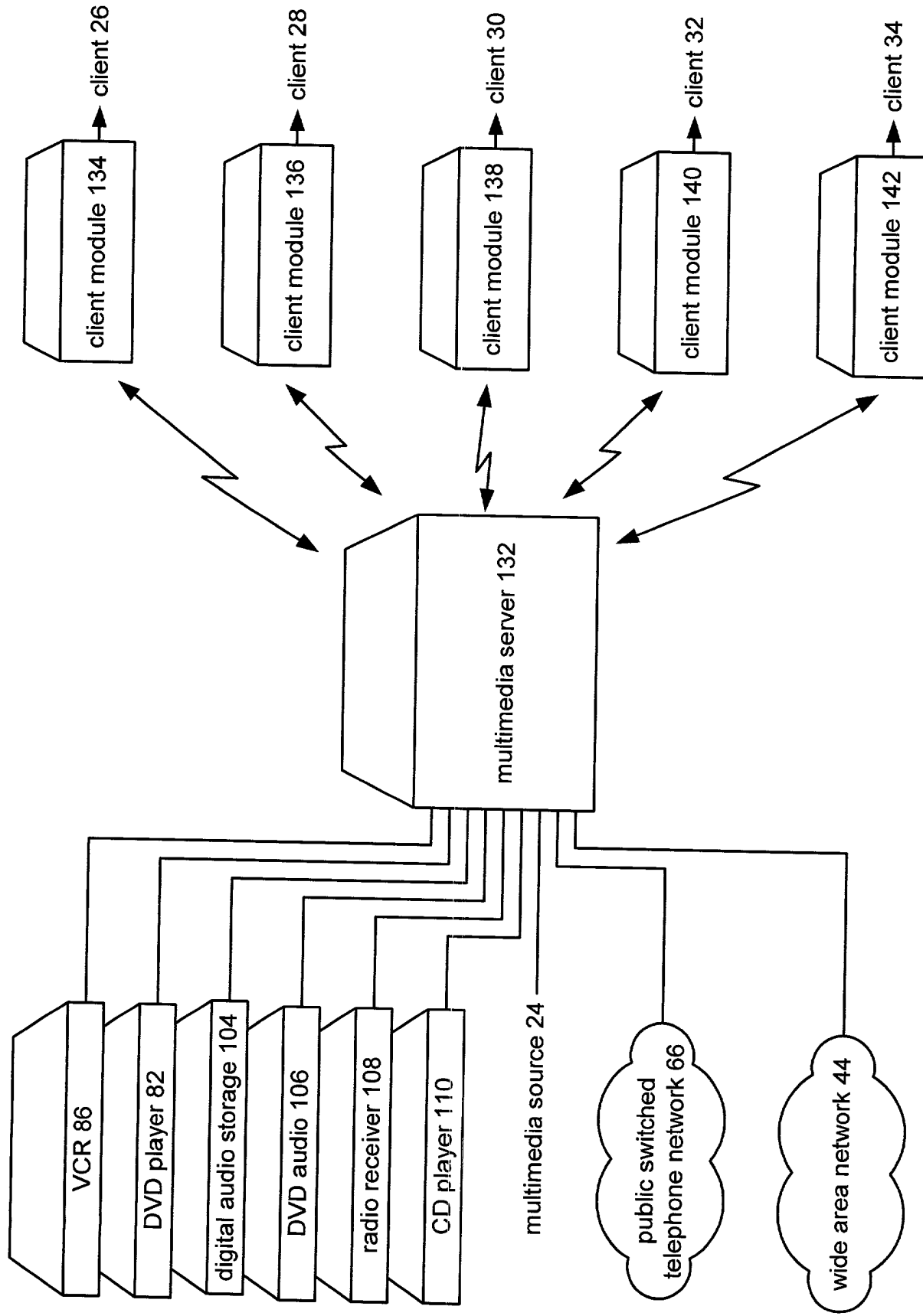
**FIG. 2** 40



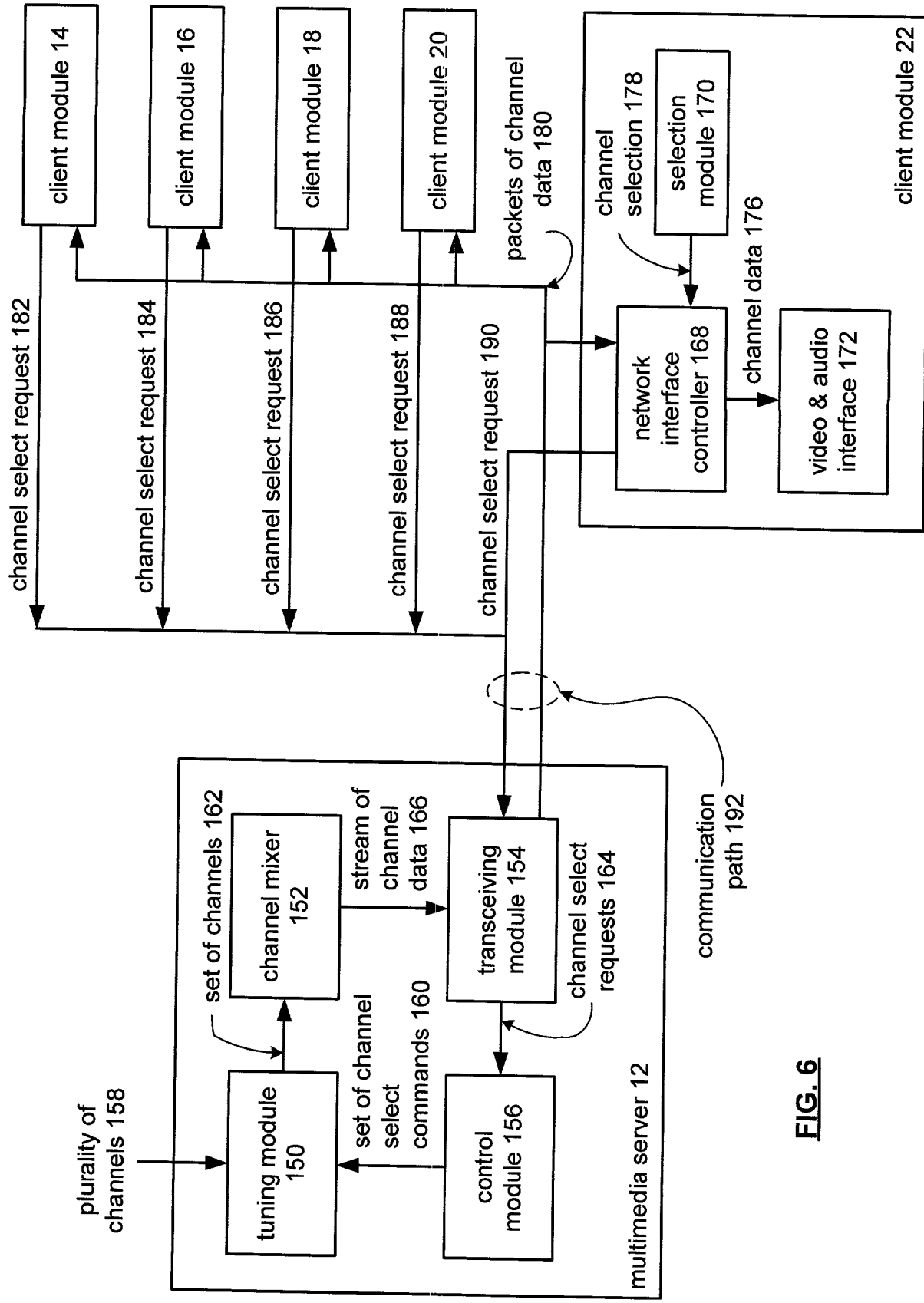
**FIG. 3** **80**



**FIG. 4** 100

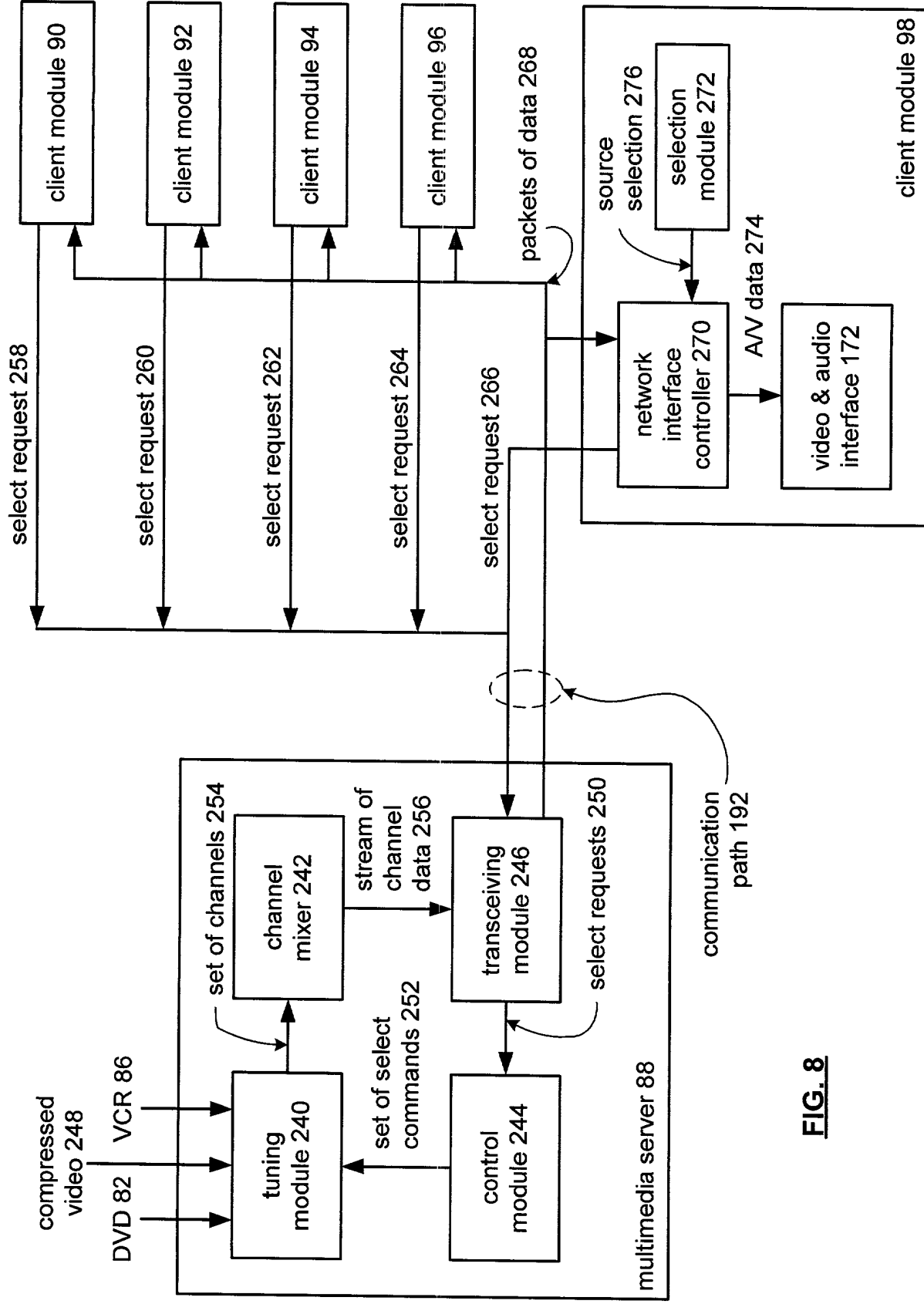


**FIG. 5** 130



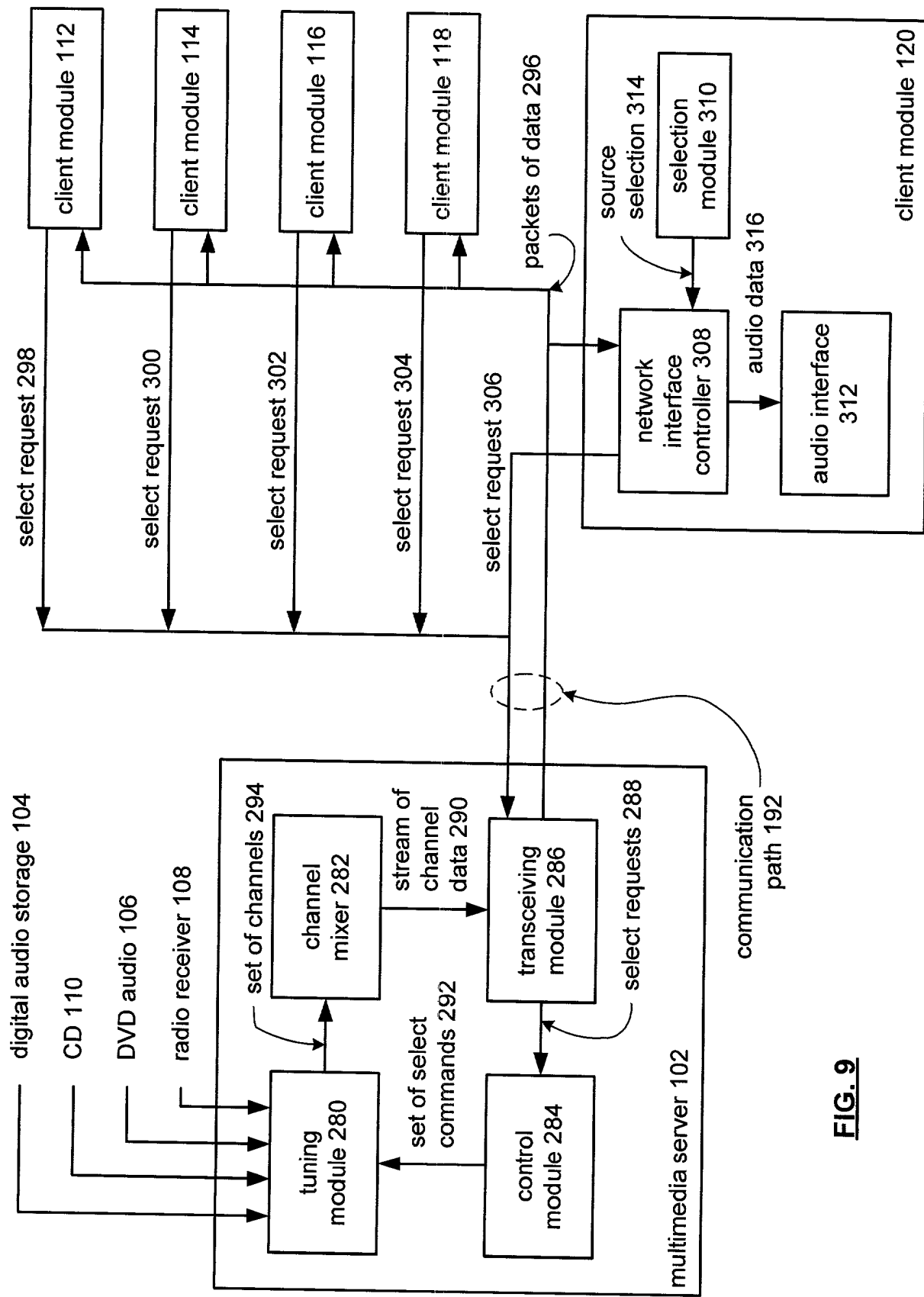
**FIG. 6**



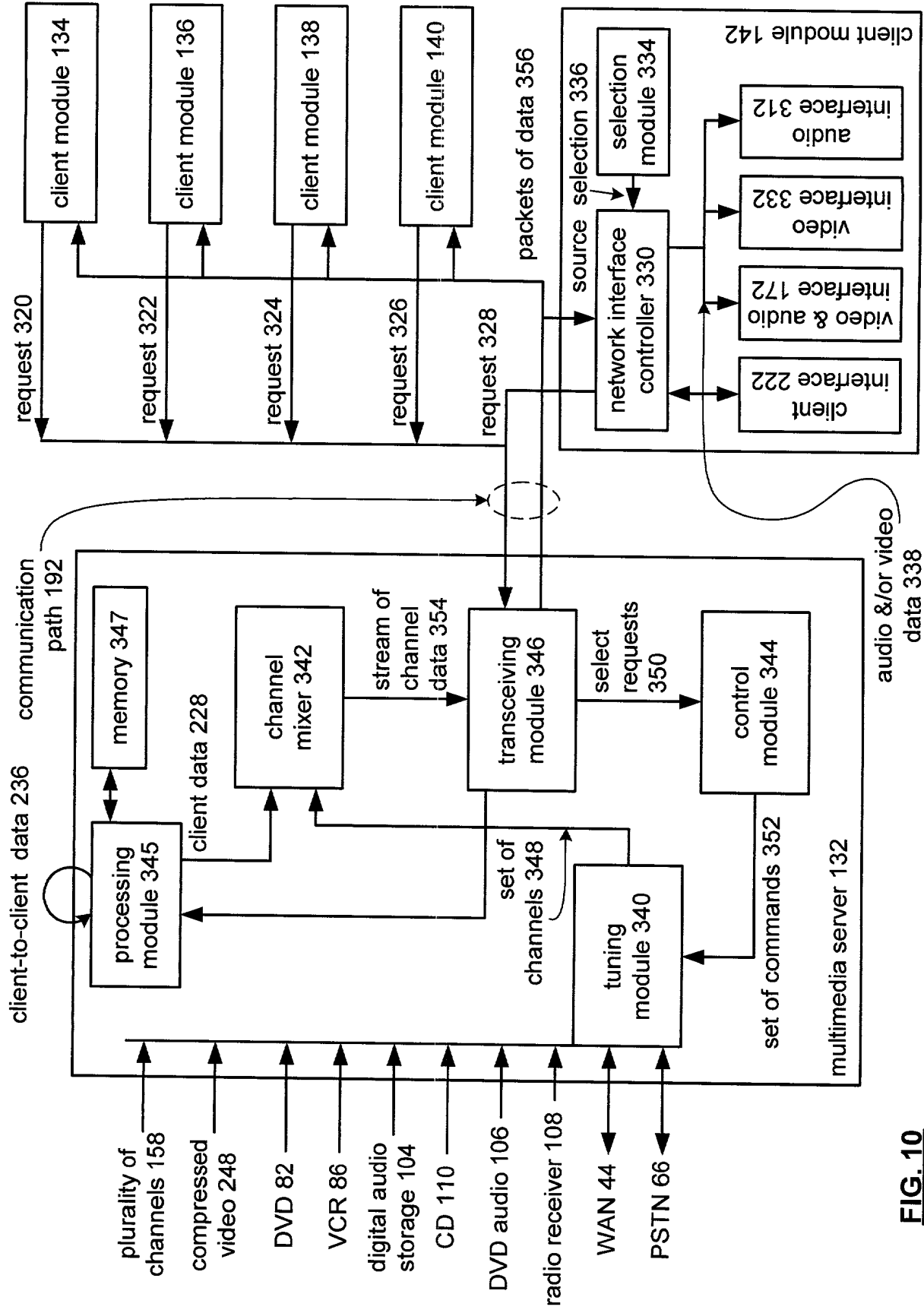


**FIG. 8**

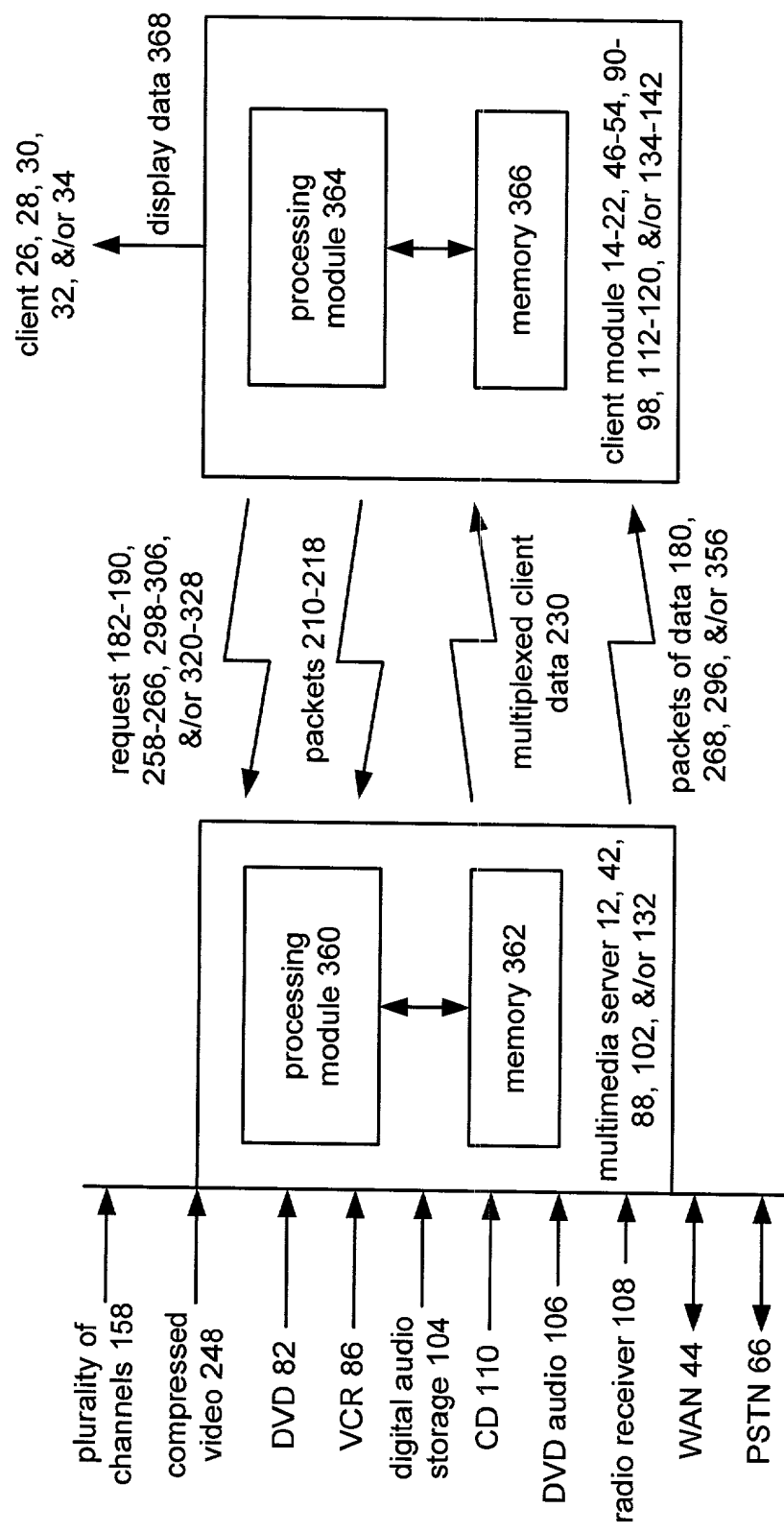




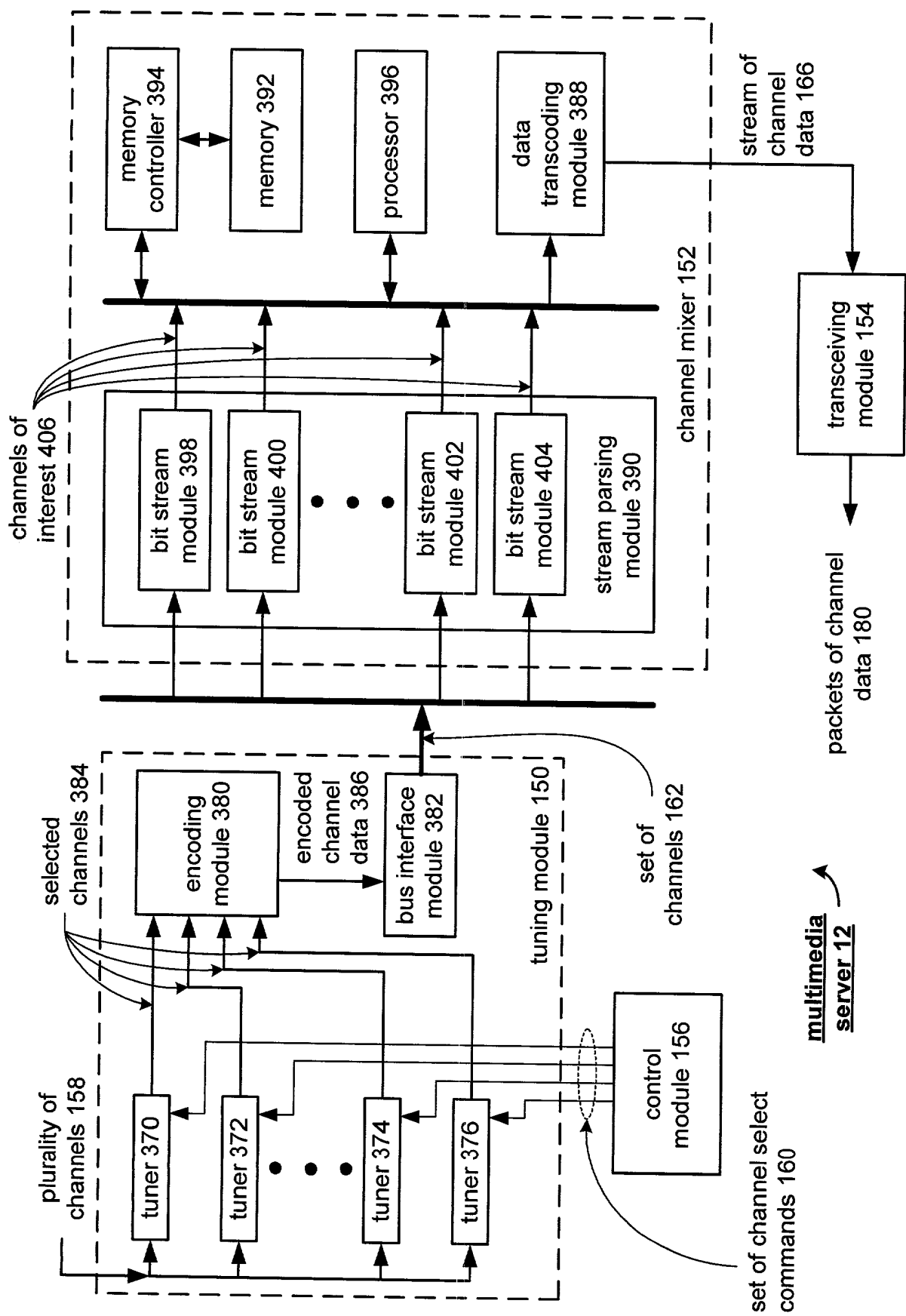
**FIG. 9**



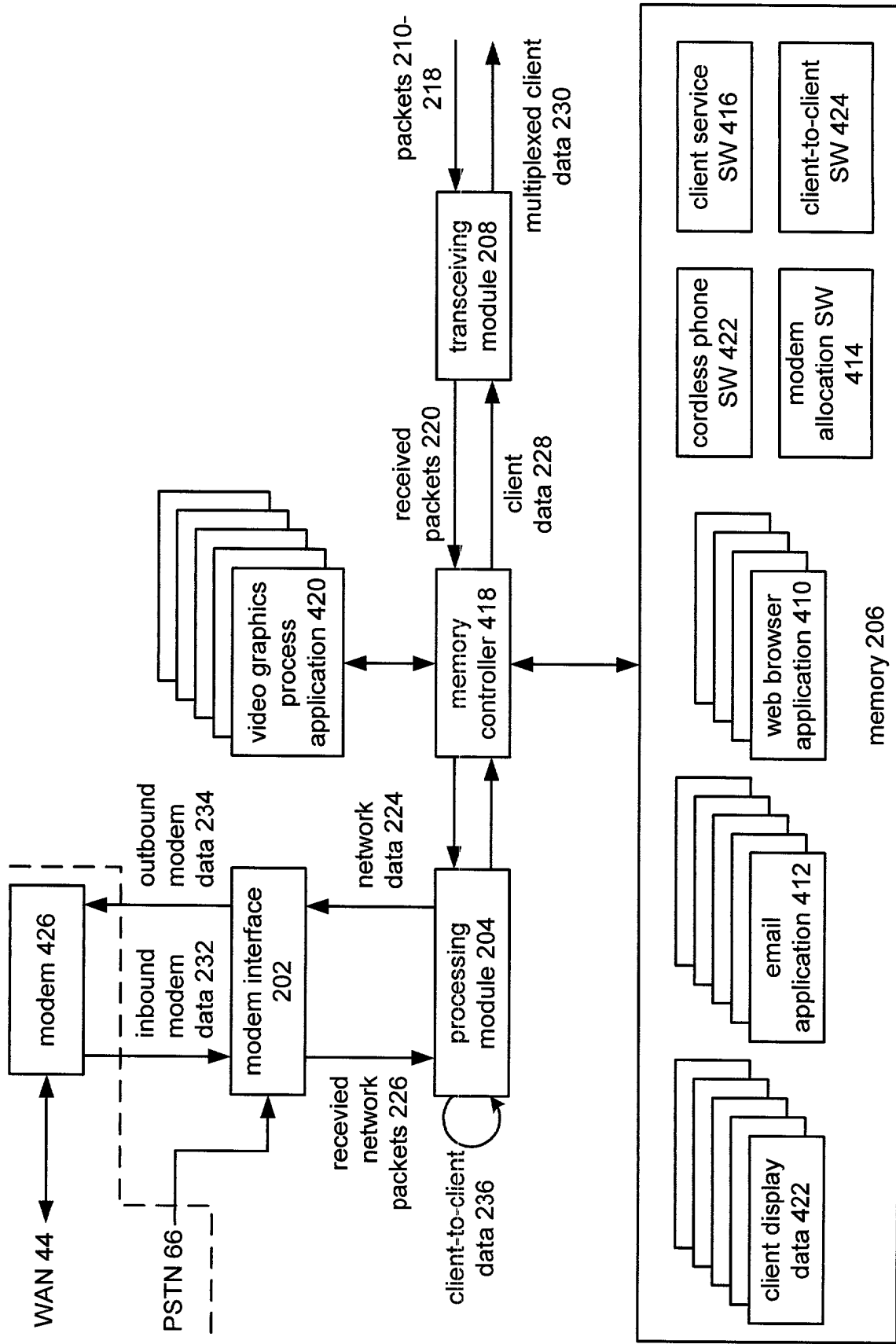
**FIG. 10**



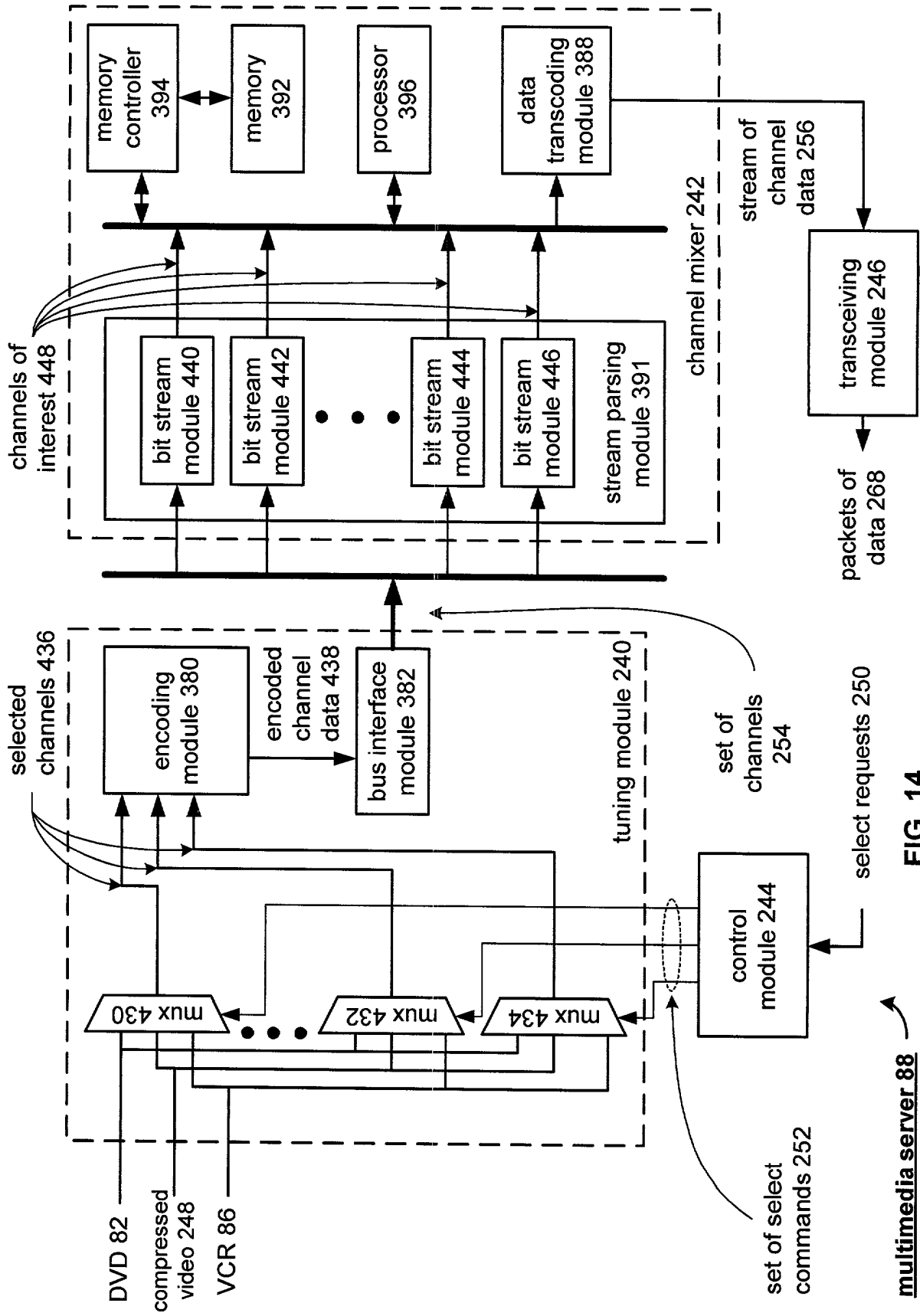
**FIG. 11**



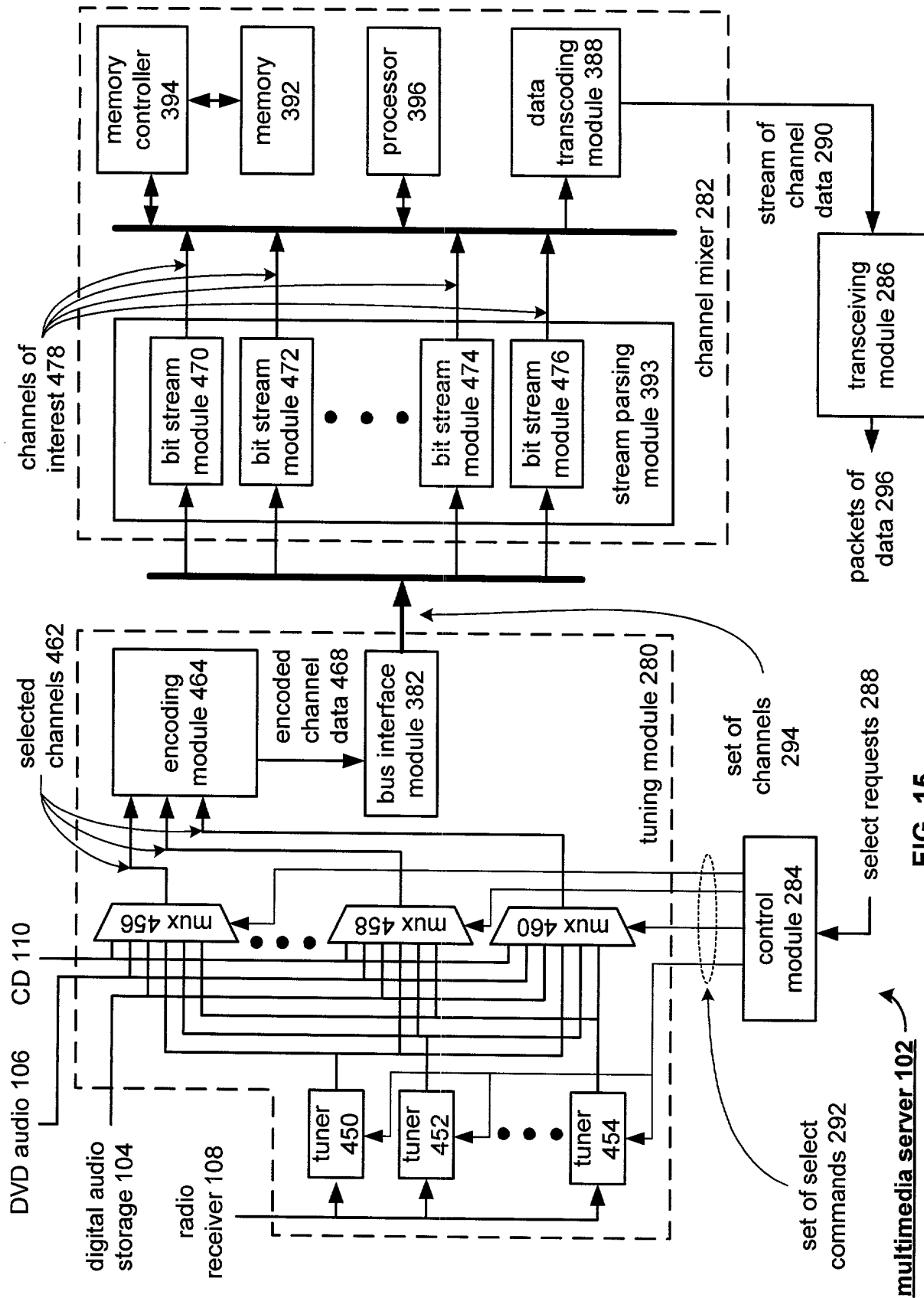
**FIG. 12**



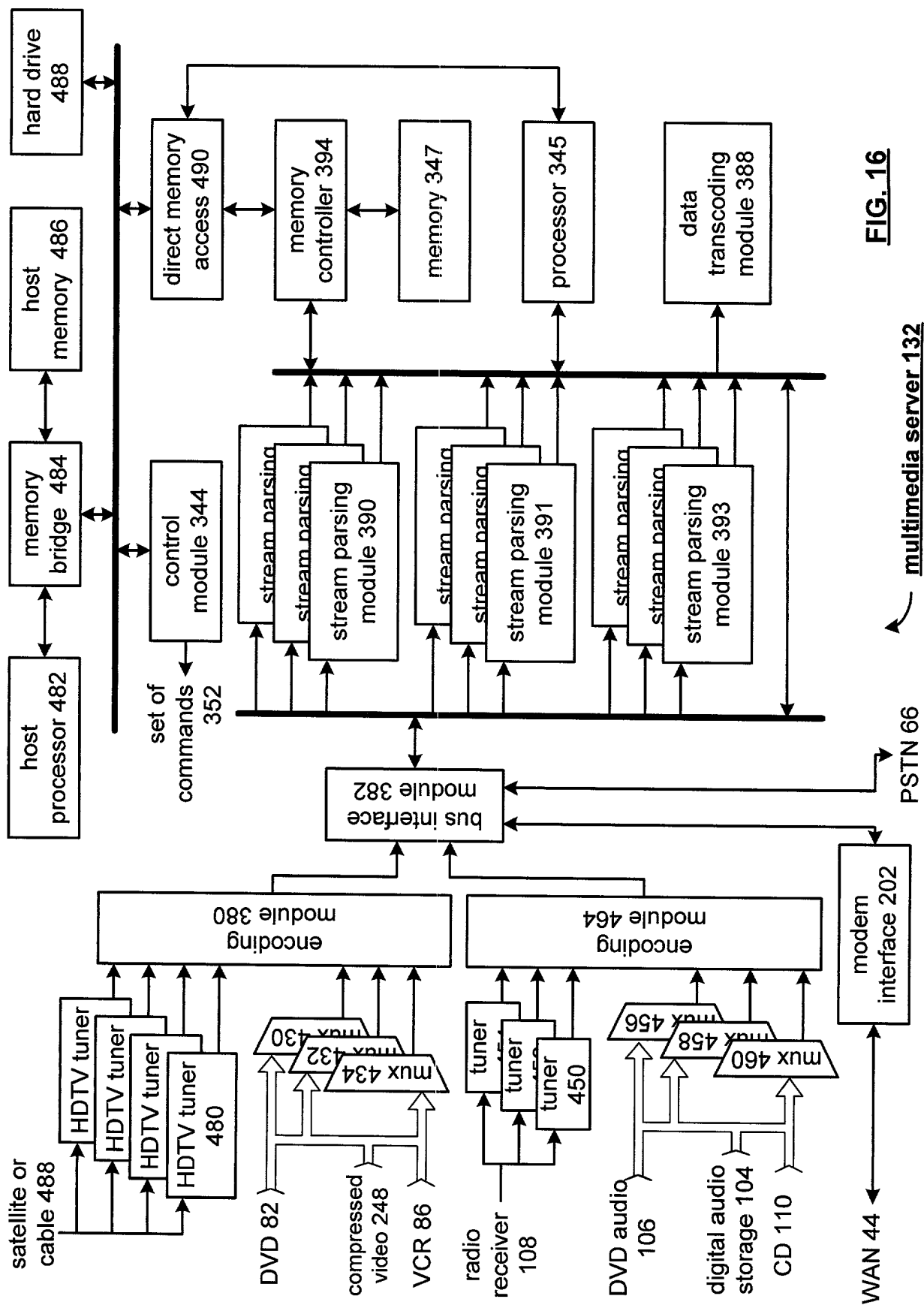
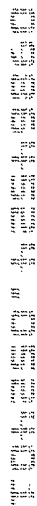
**FIG. 13**  
multimedia server 42



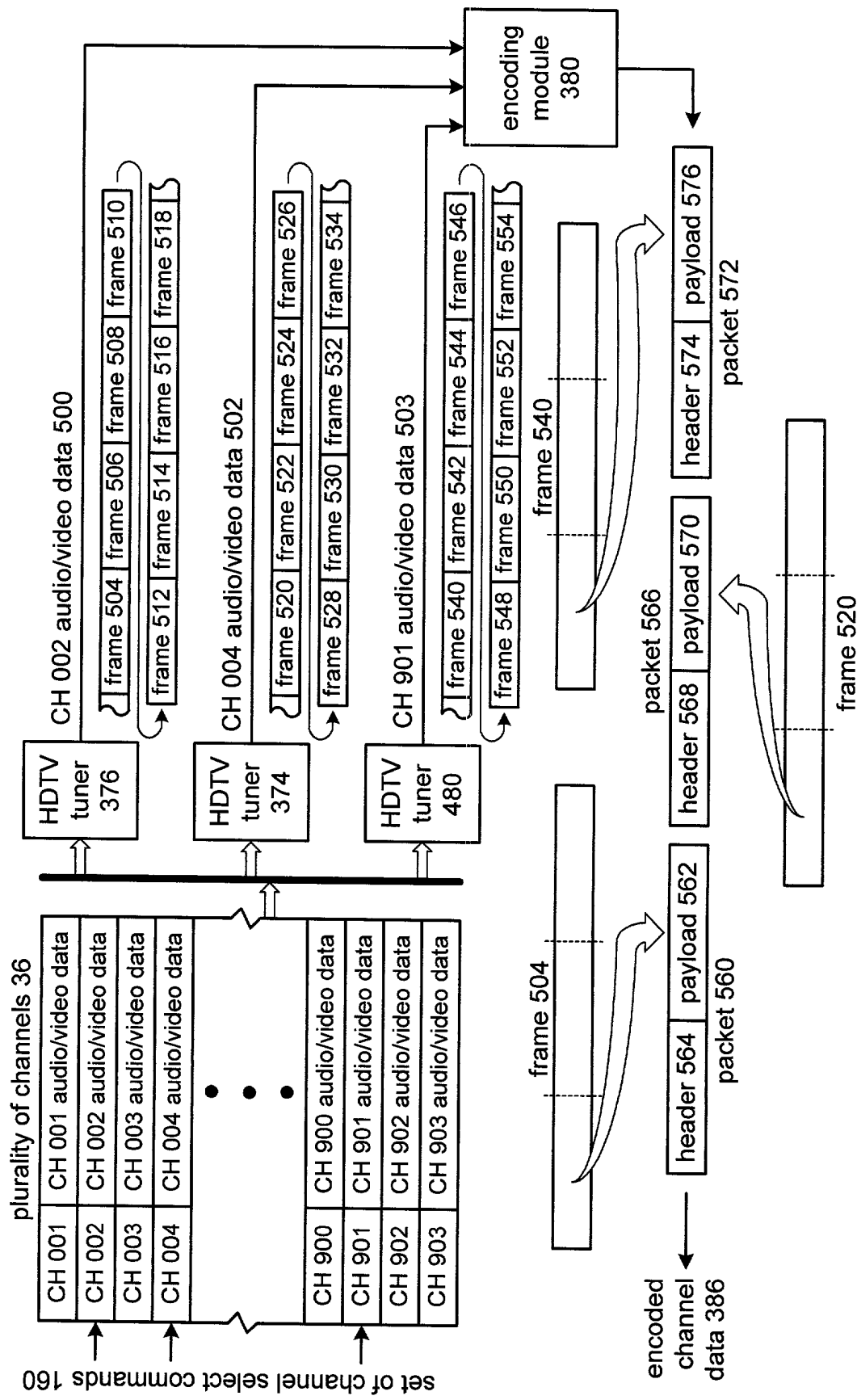
**FIG. 14**



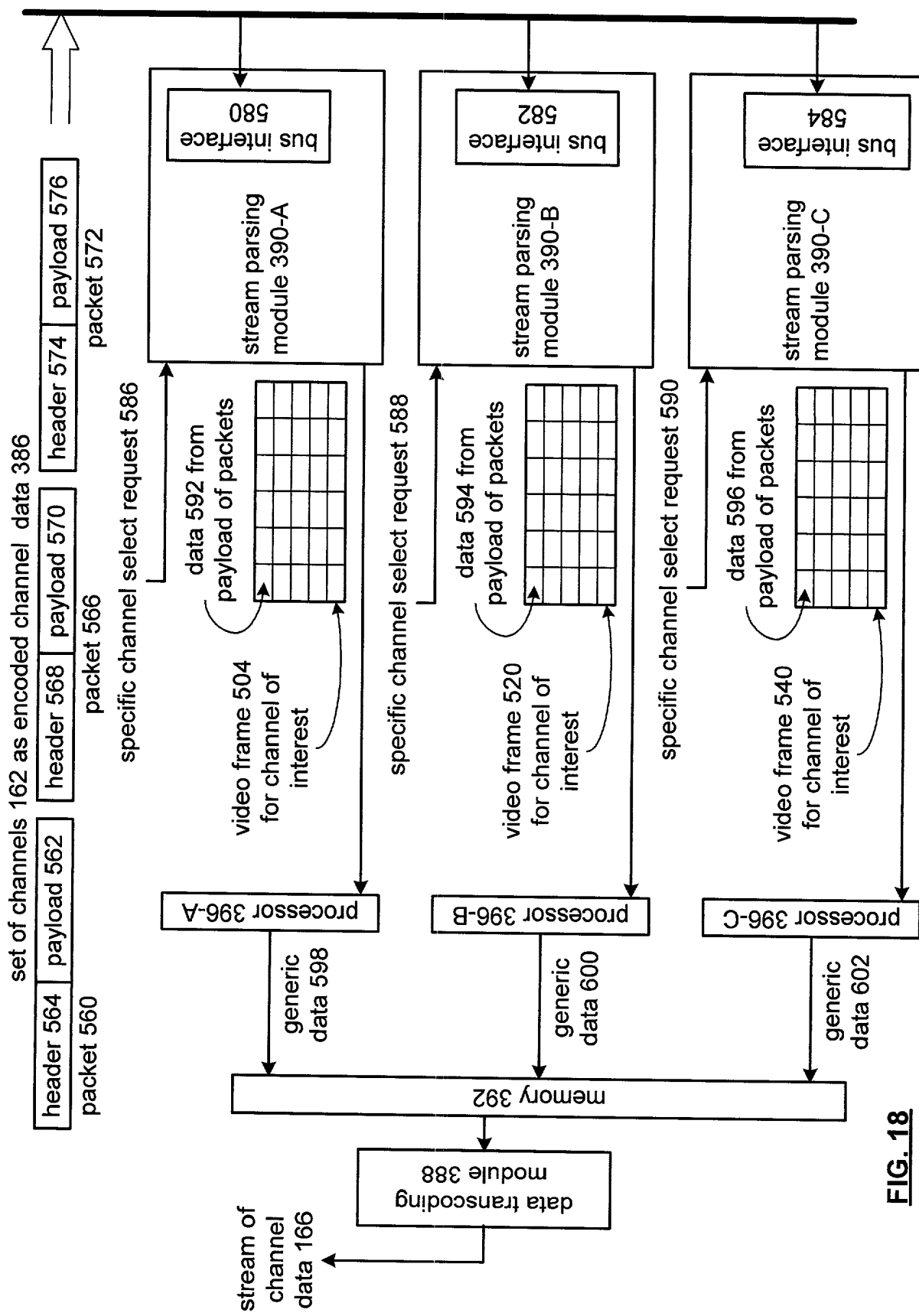
**FIG. 15**



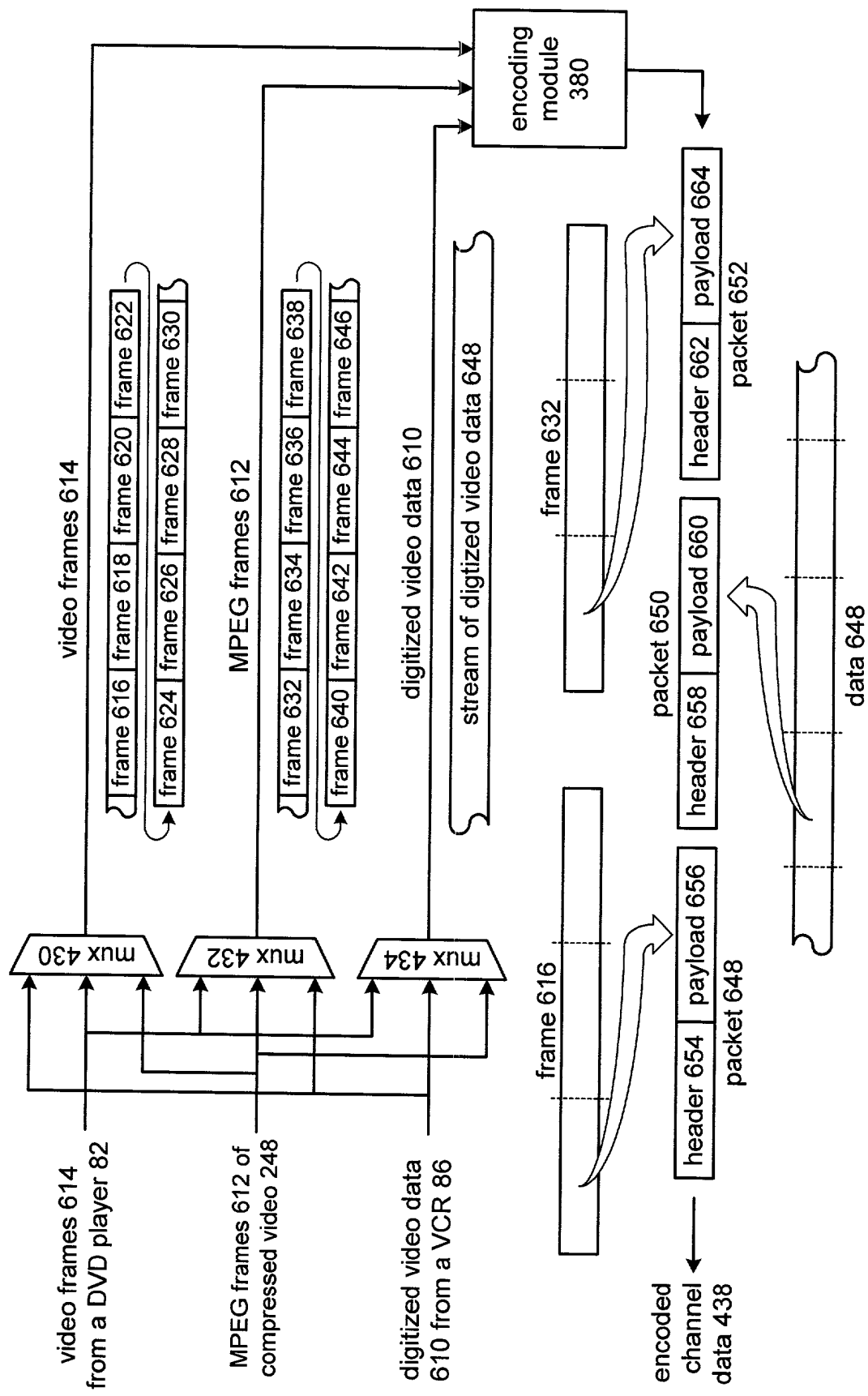




**FIG. 17**



**FIG. 18**



**FIG. 19**

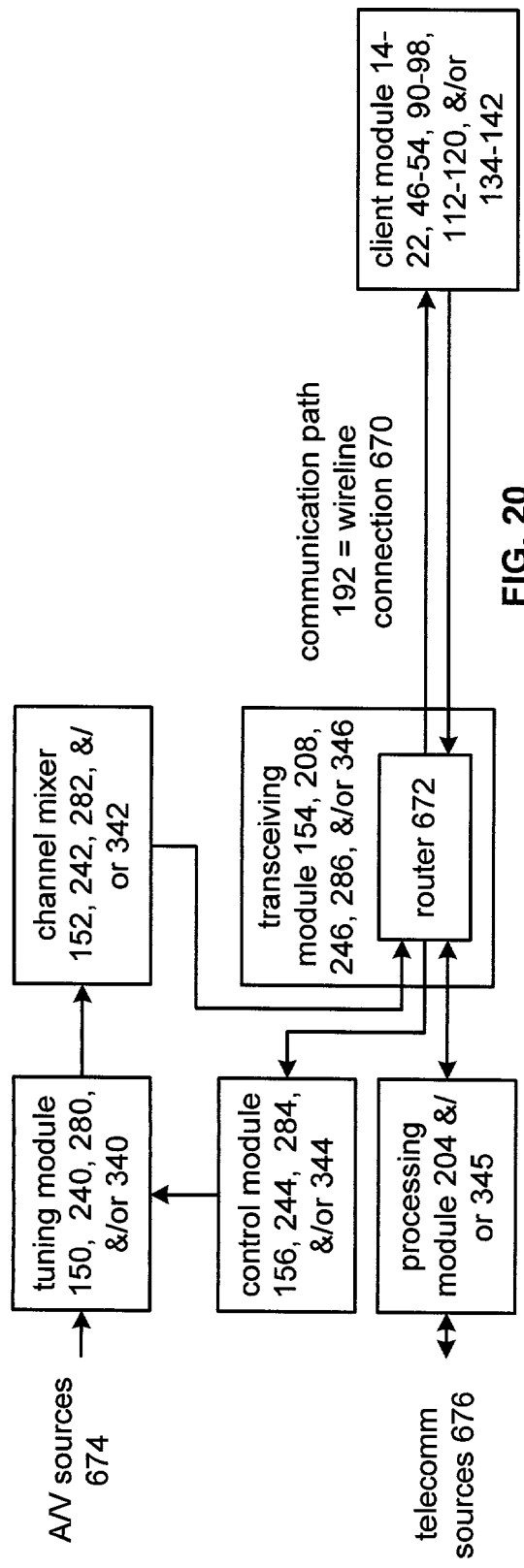


FIG. 20

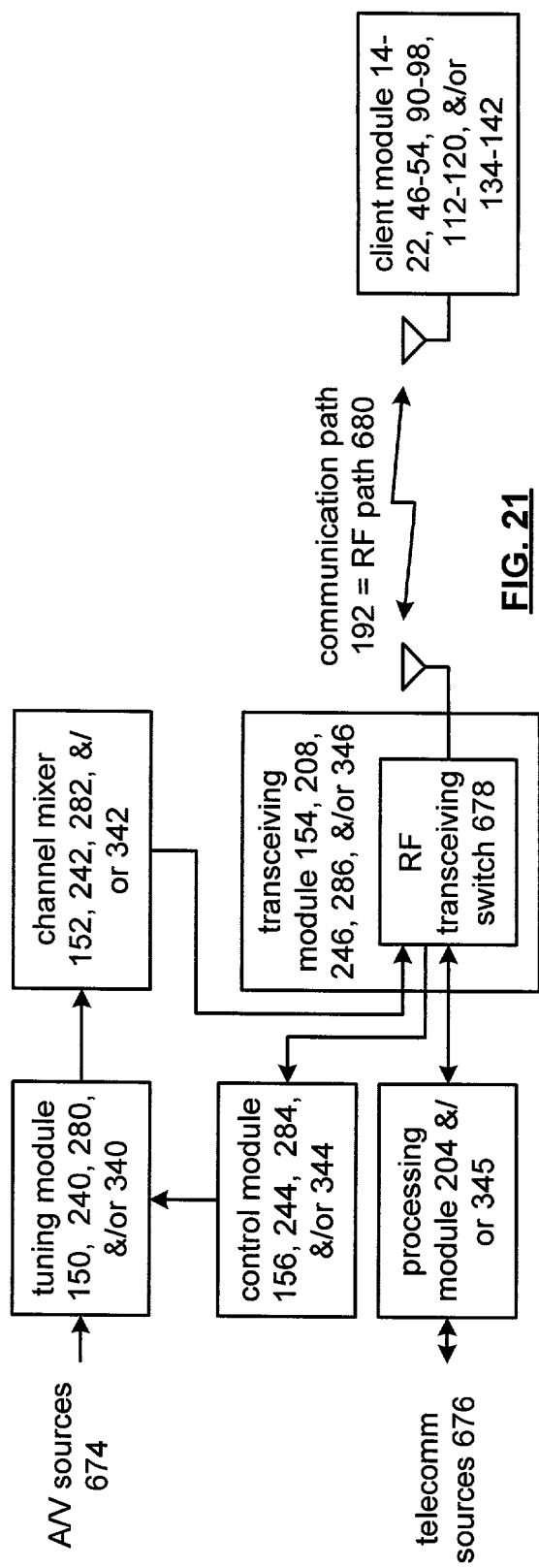


FIG. 21

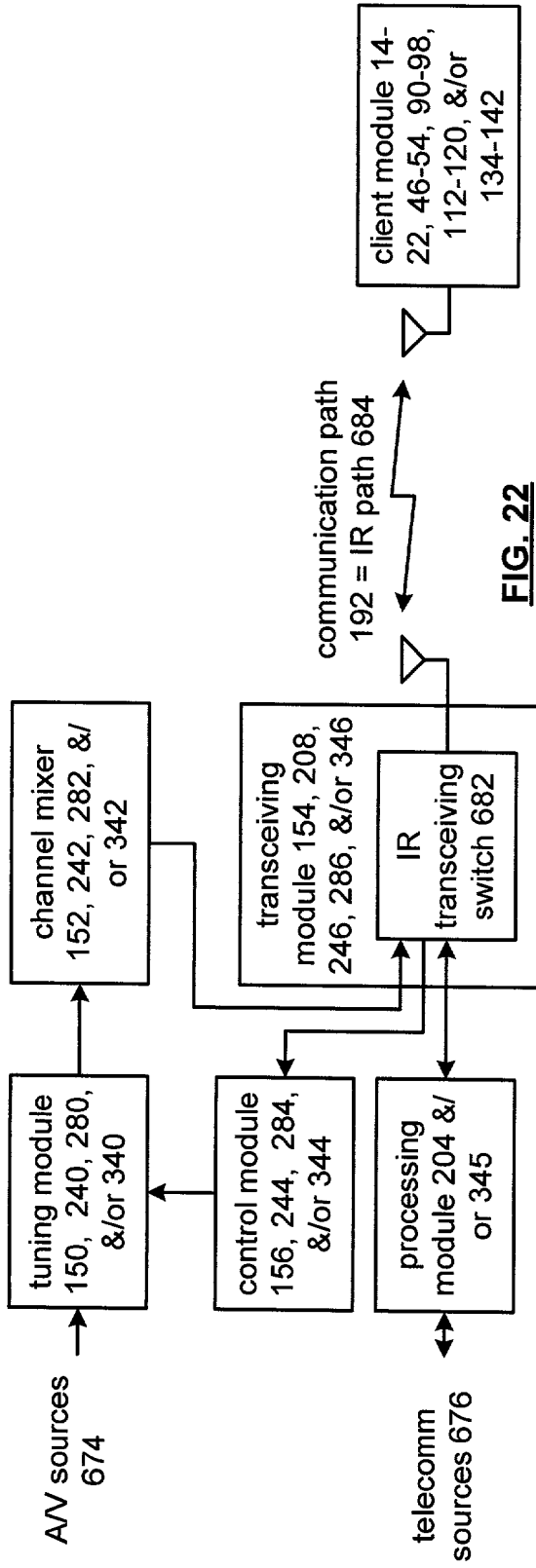


FIG. 22

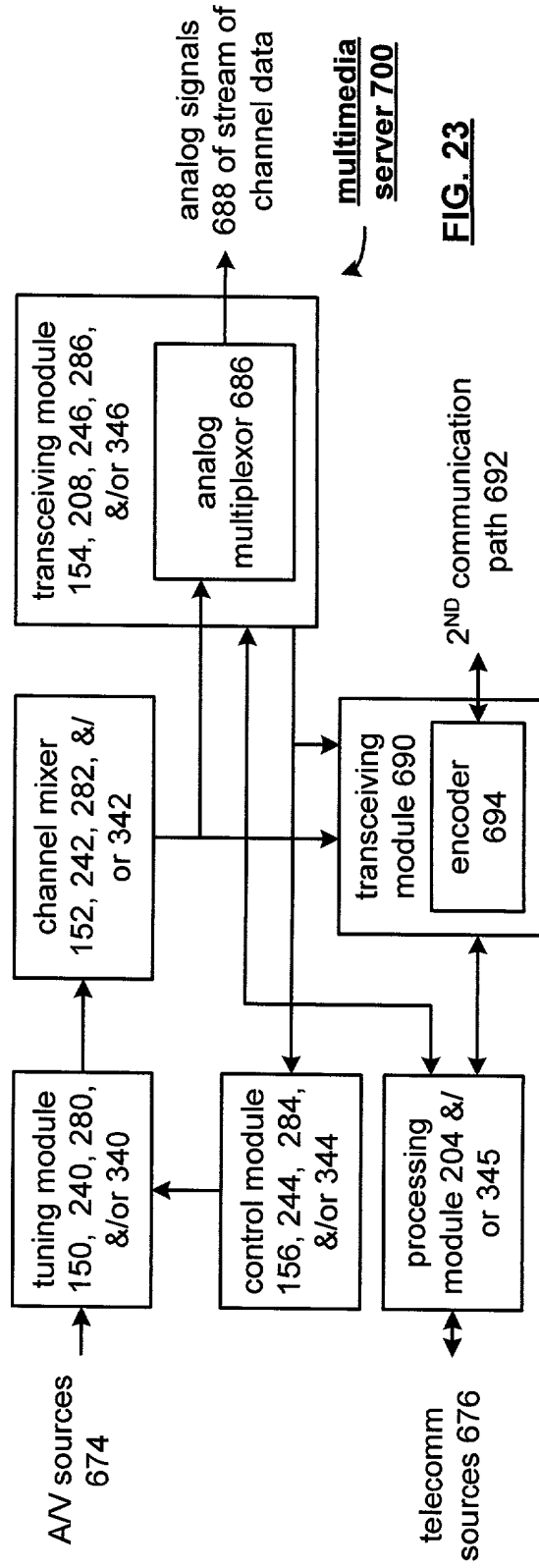
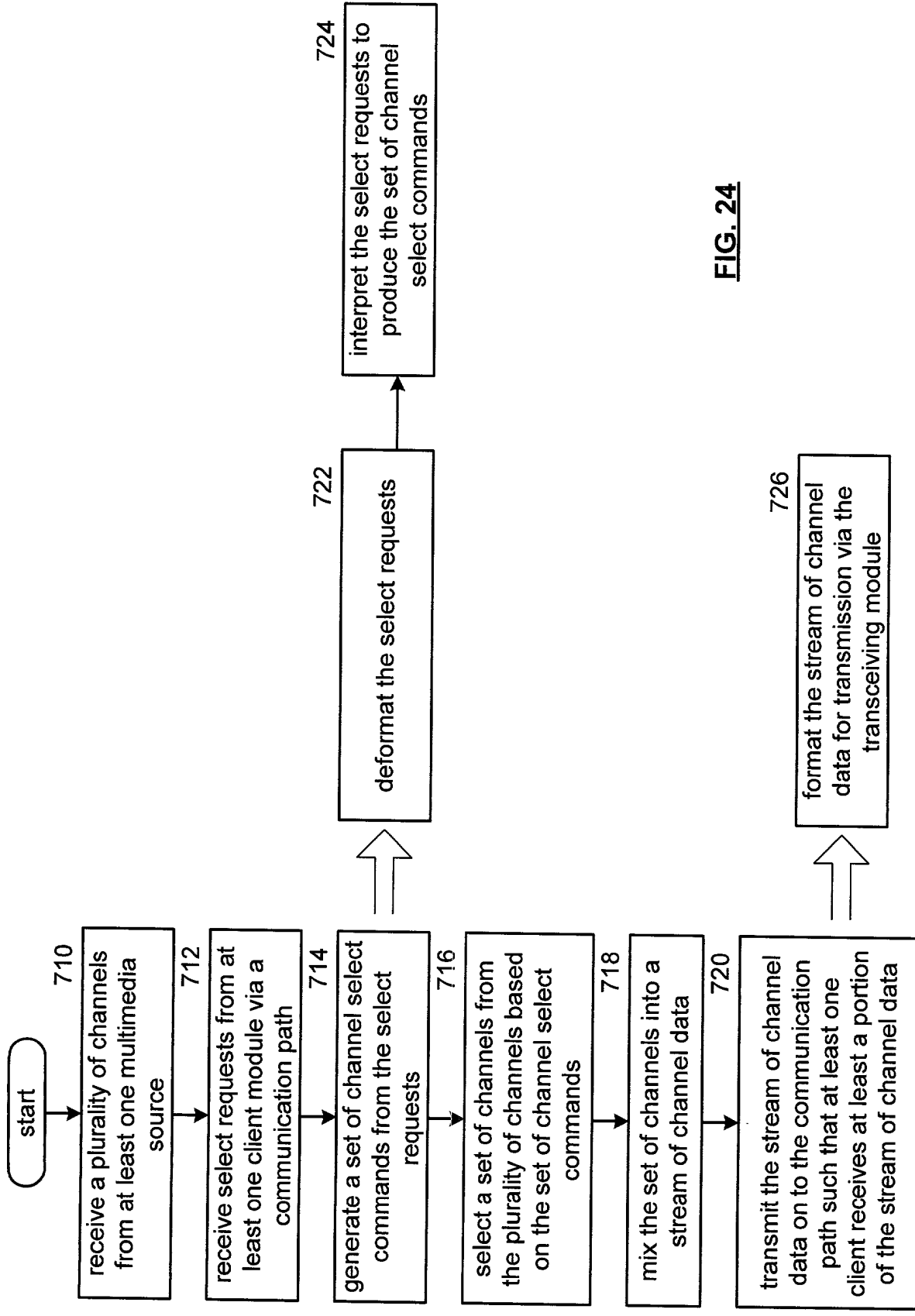


FIG. 23



**FIG. 24**

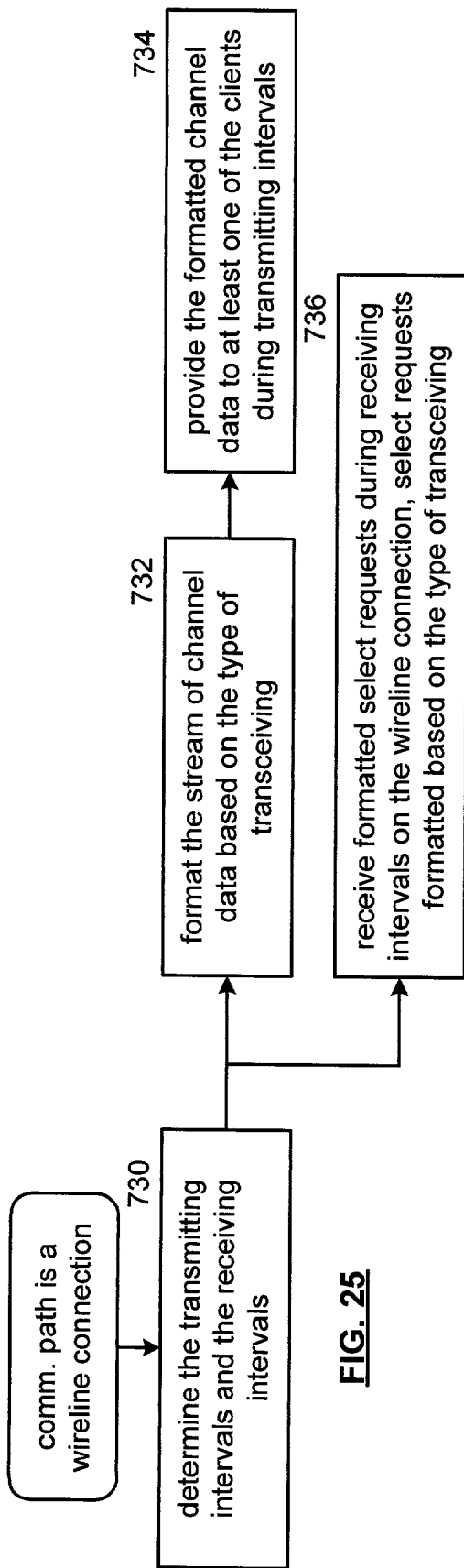


FIG. 25

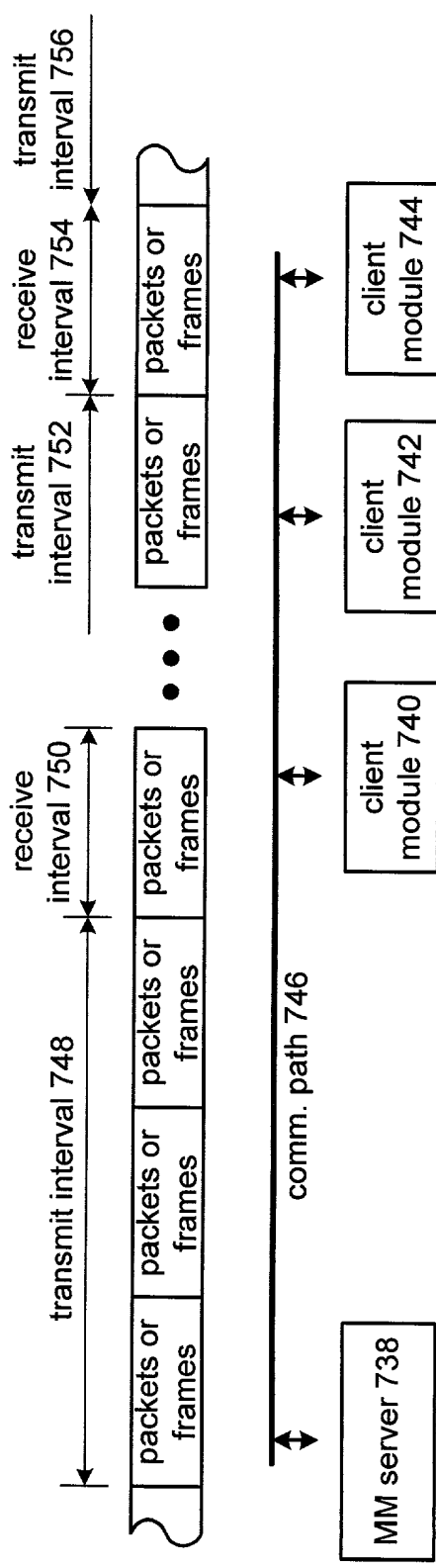
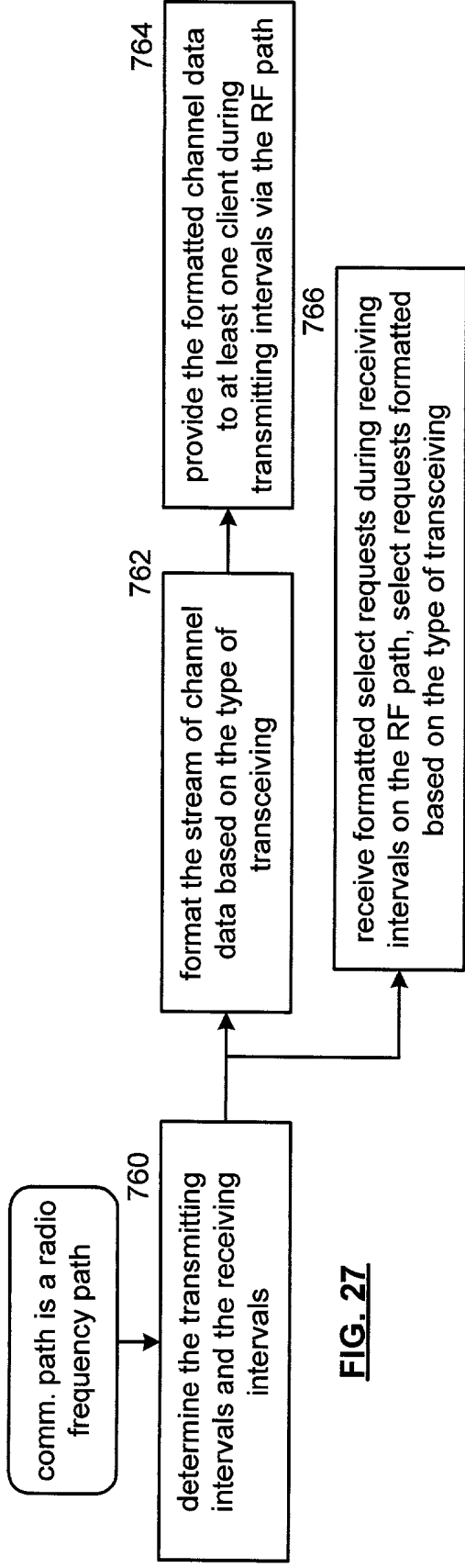
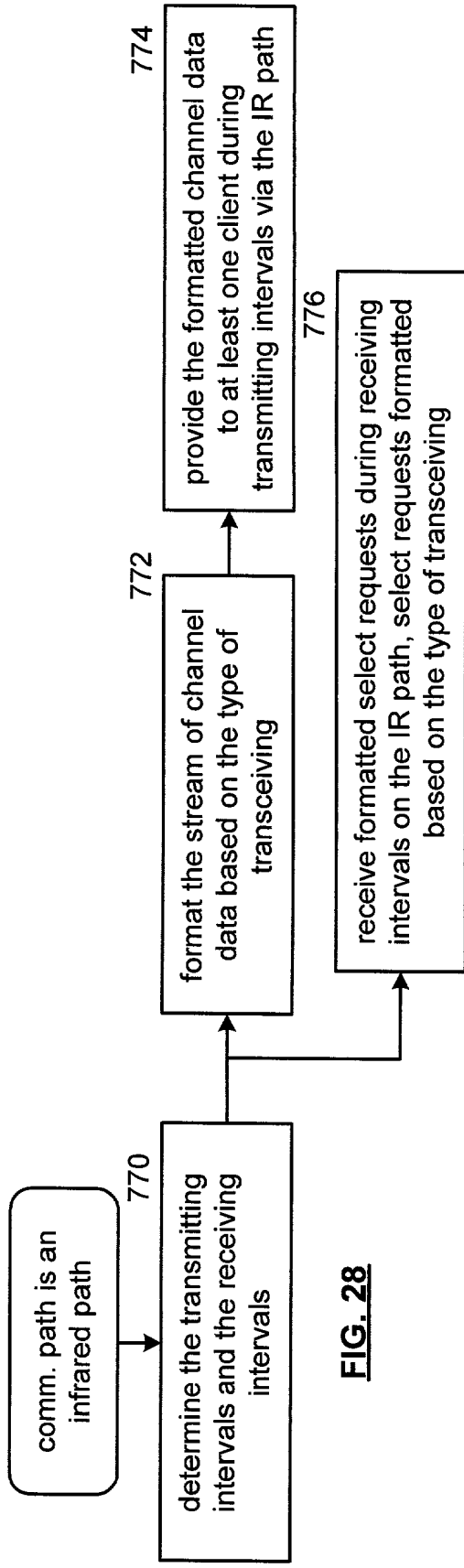


FIG. 26

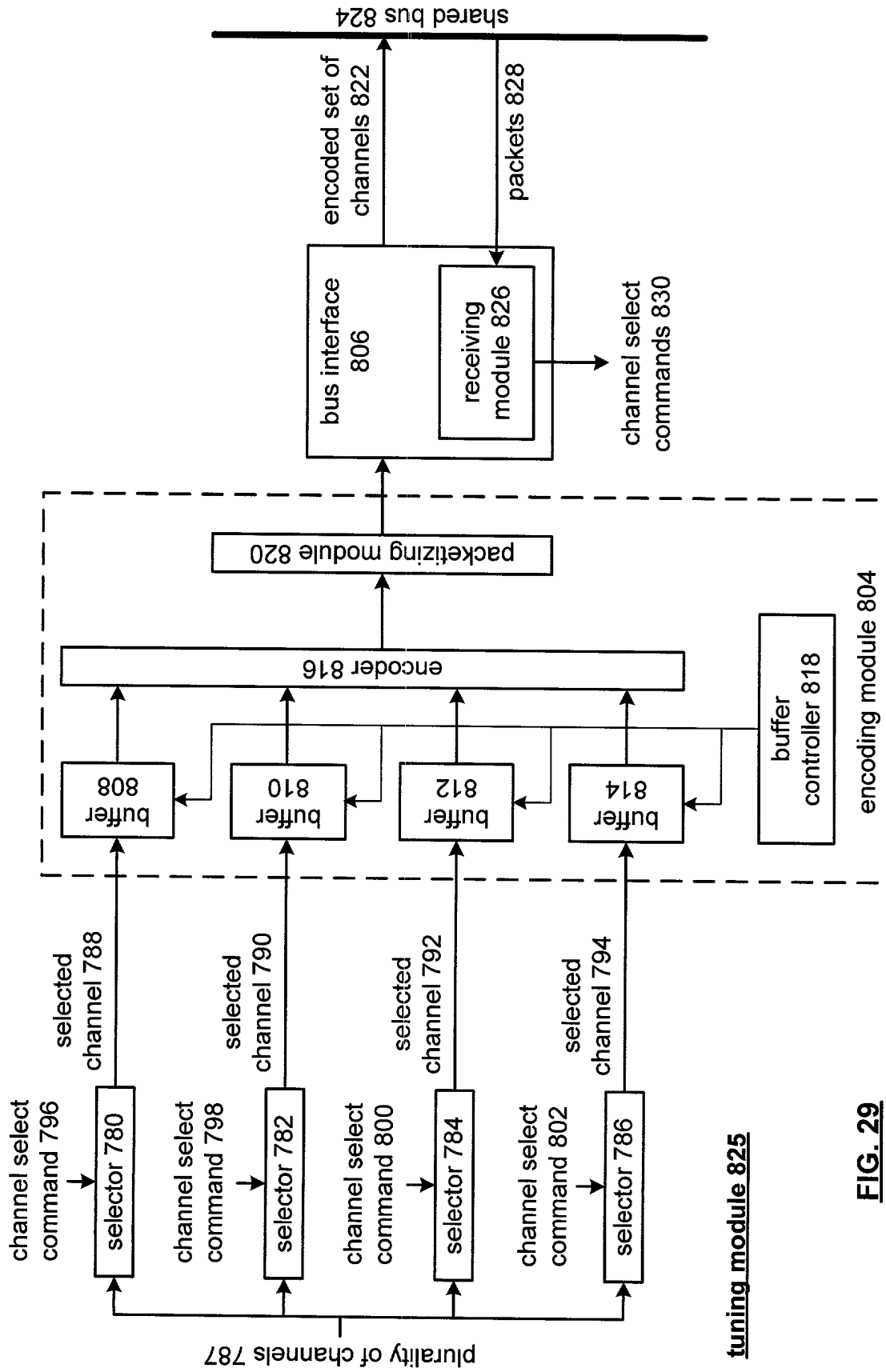


**FIG. 27**



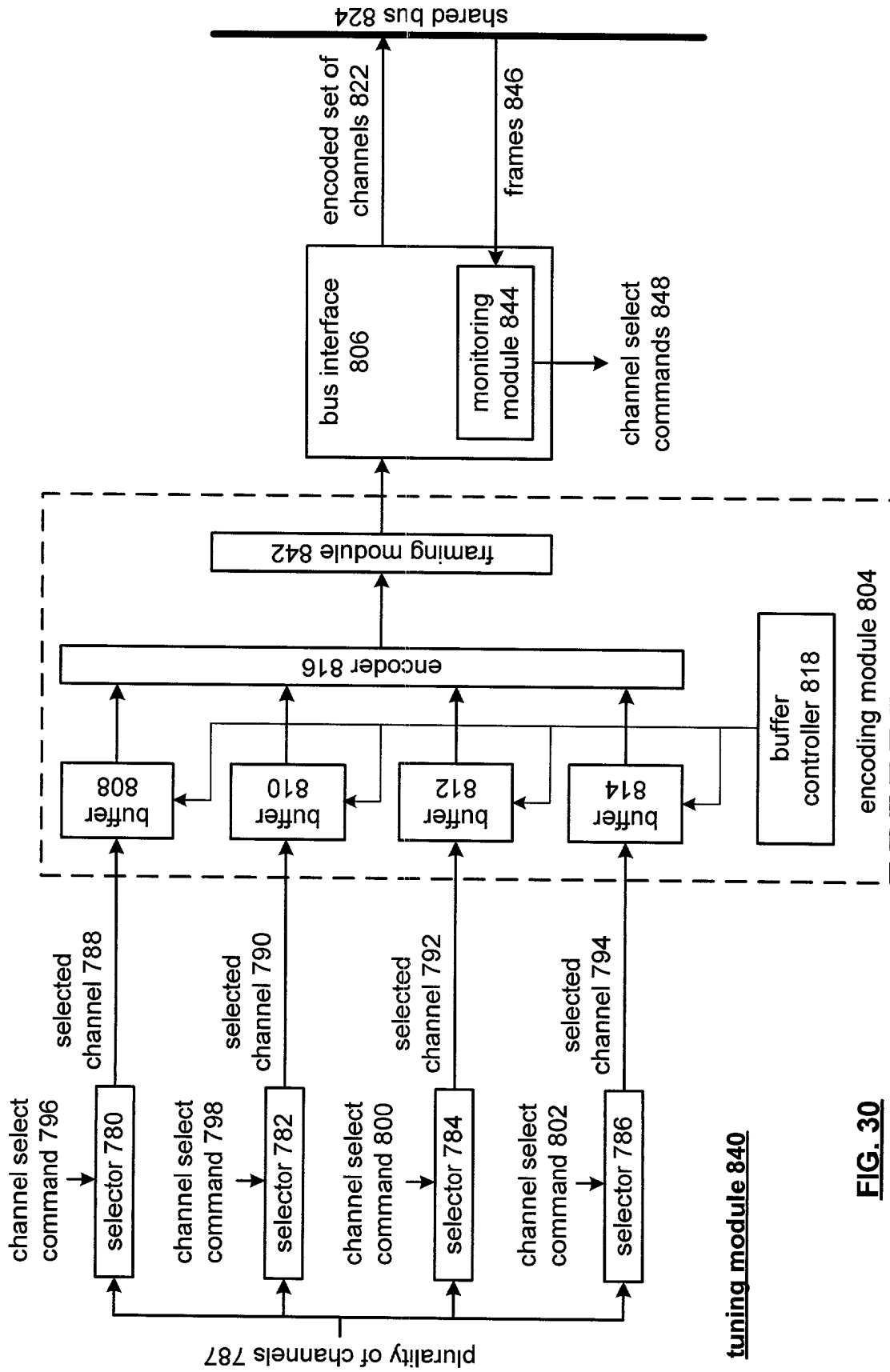
**FIG. 28**





**tuning module 825**

**FIG. 29**



**FIG. 30**

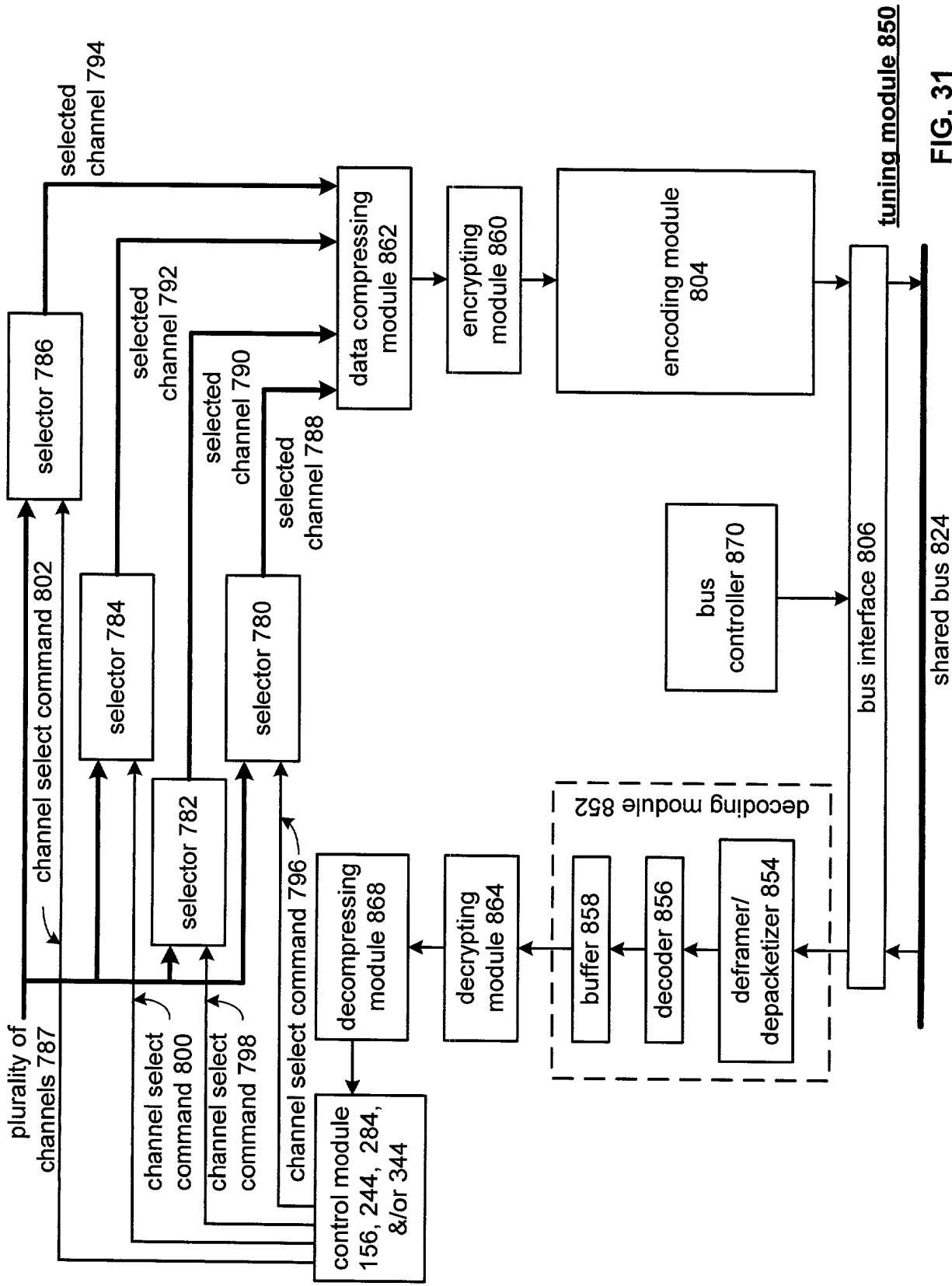
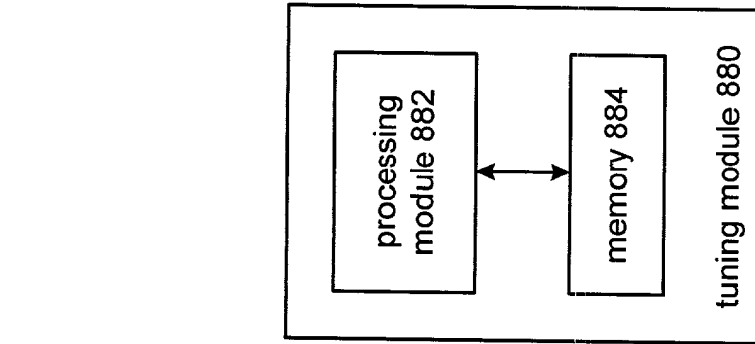
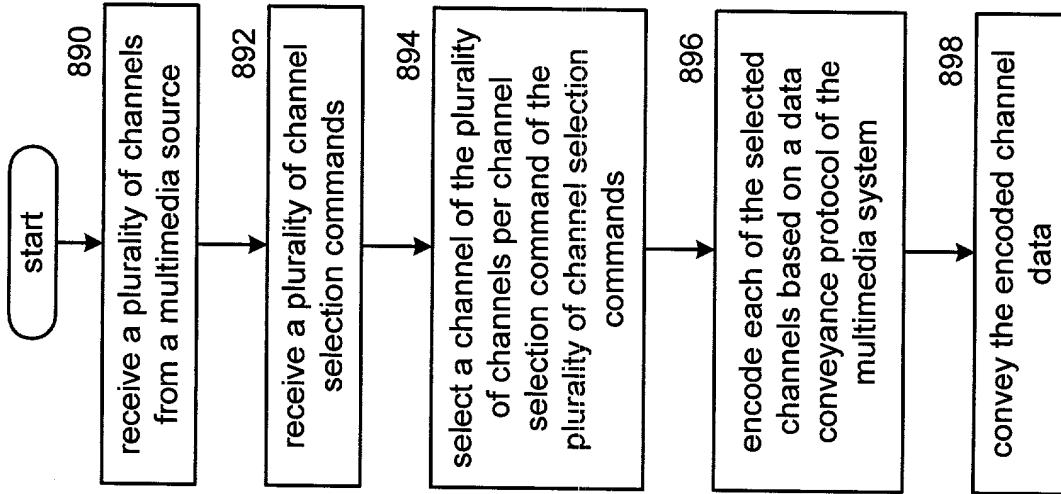


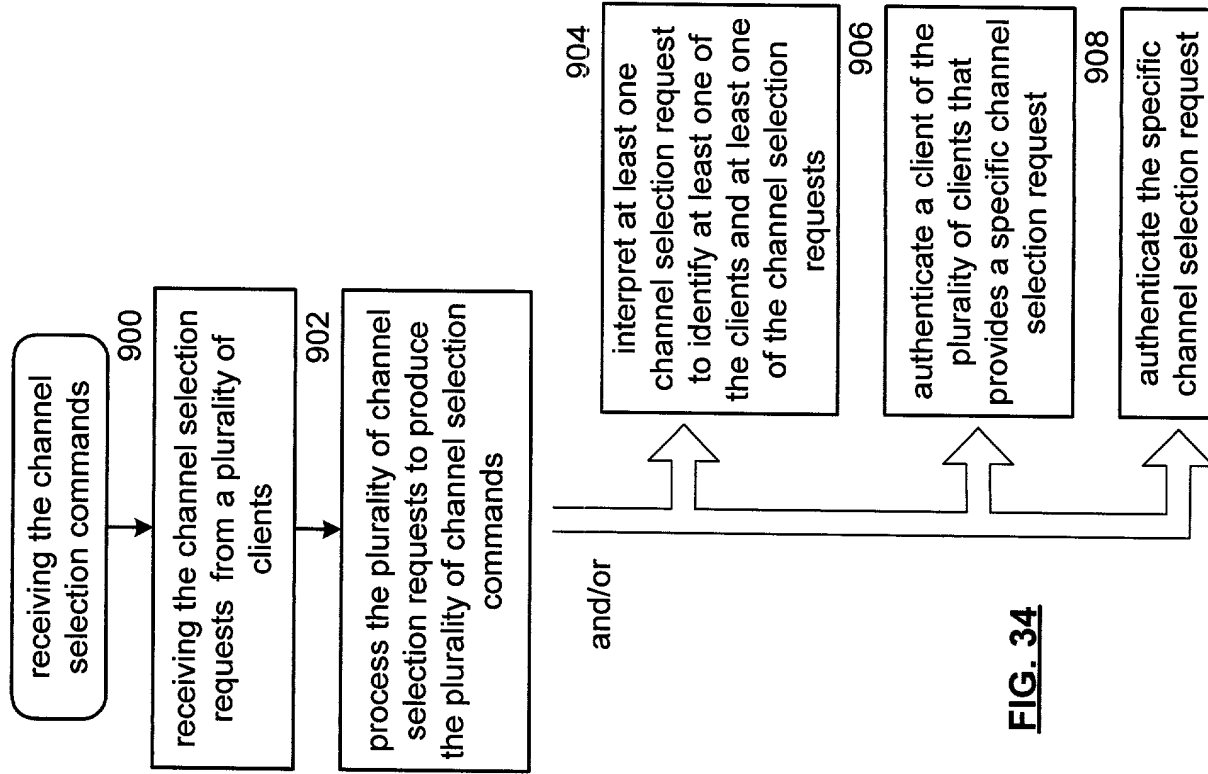
FIG. 31



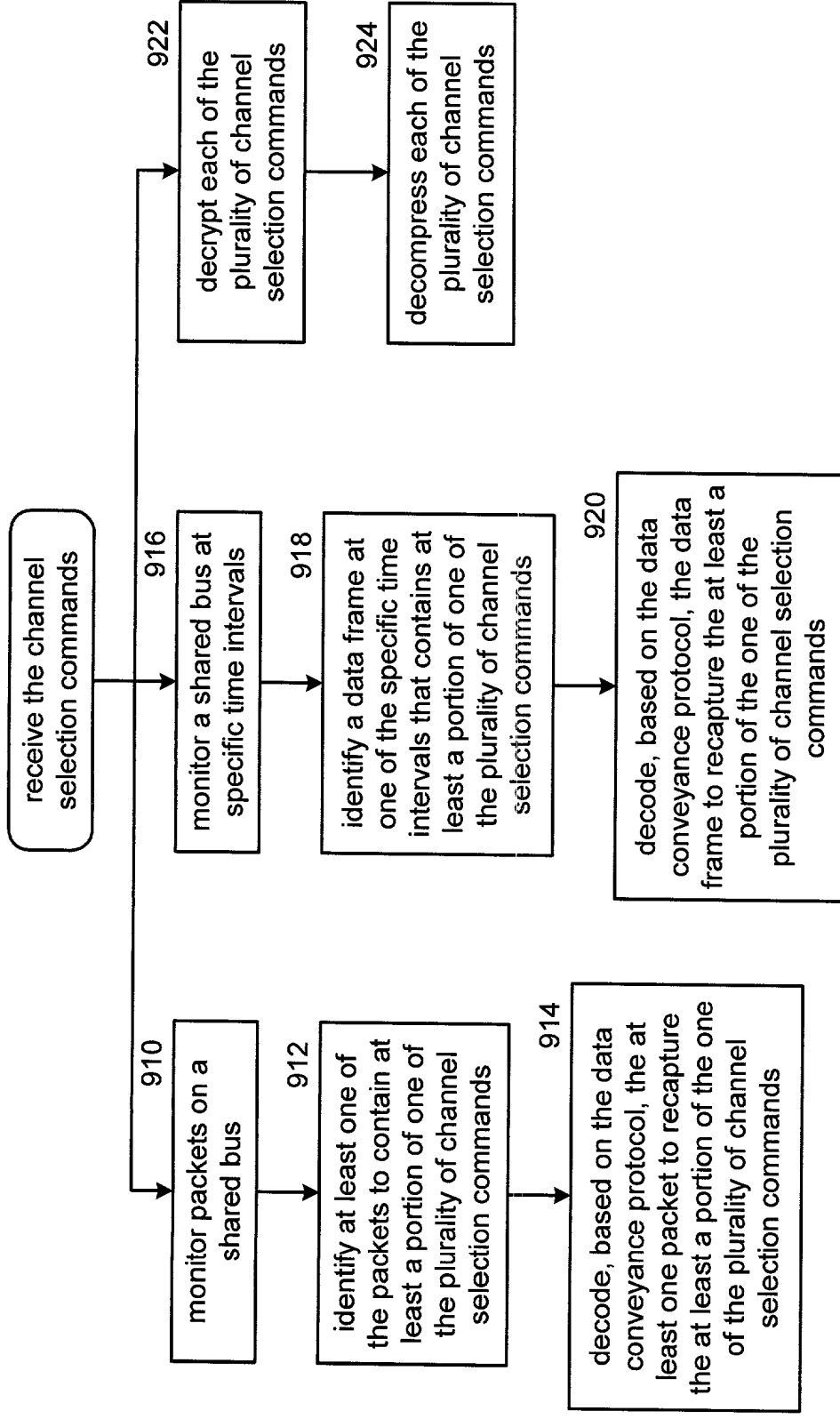
**FIG. 32**



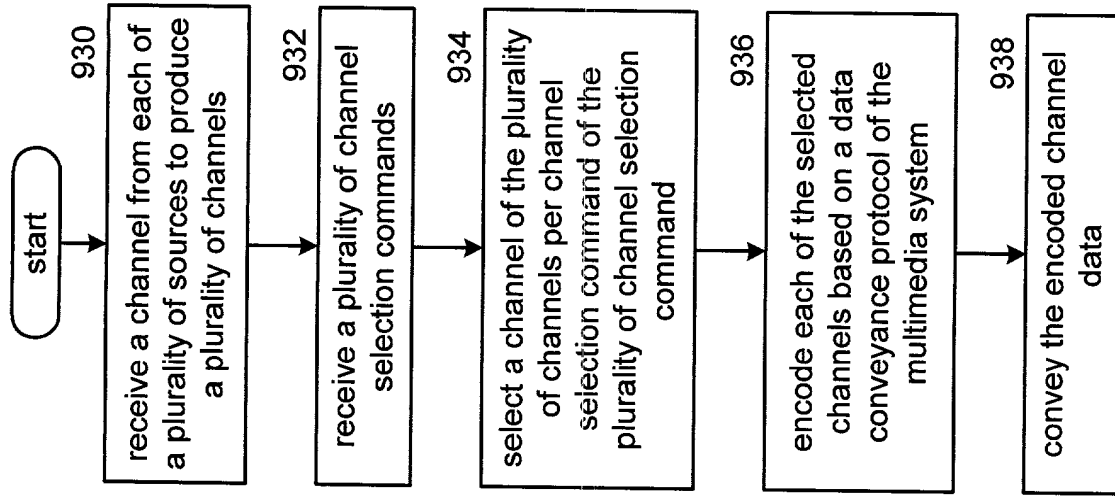
**FIG. 33**



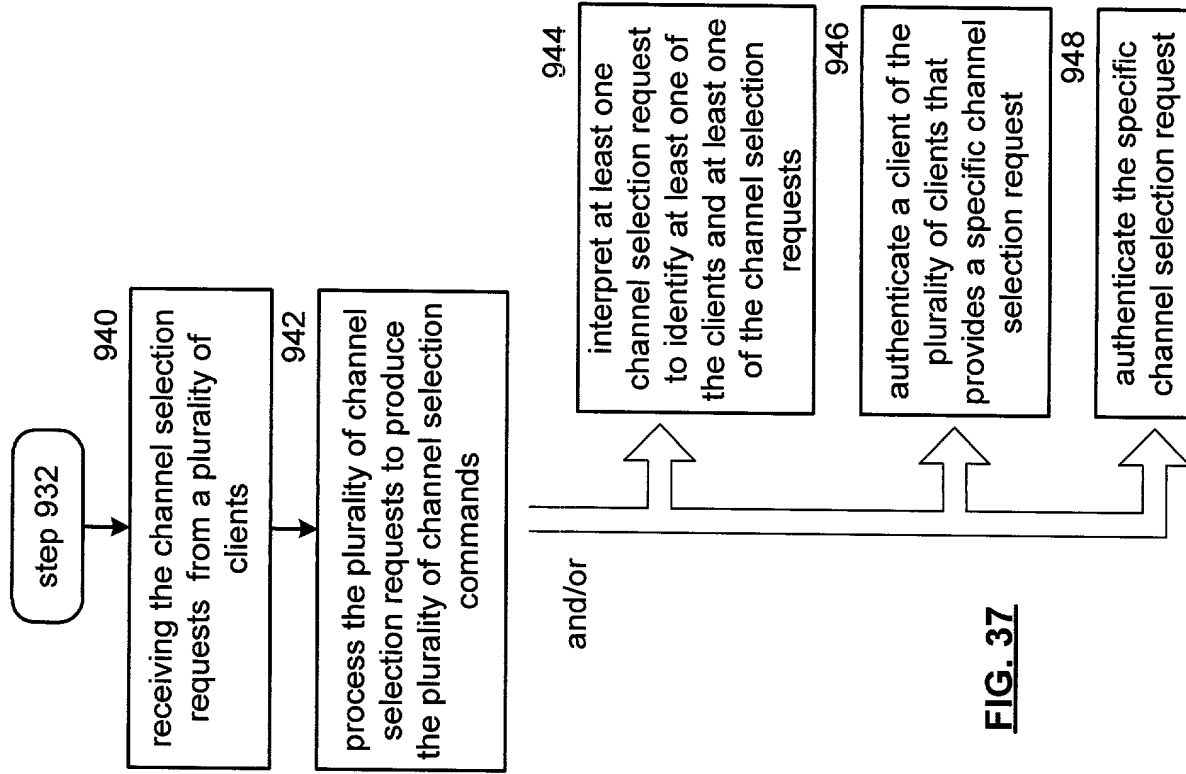
**FIG. 34**



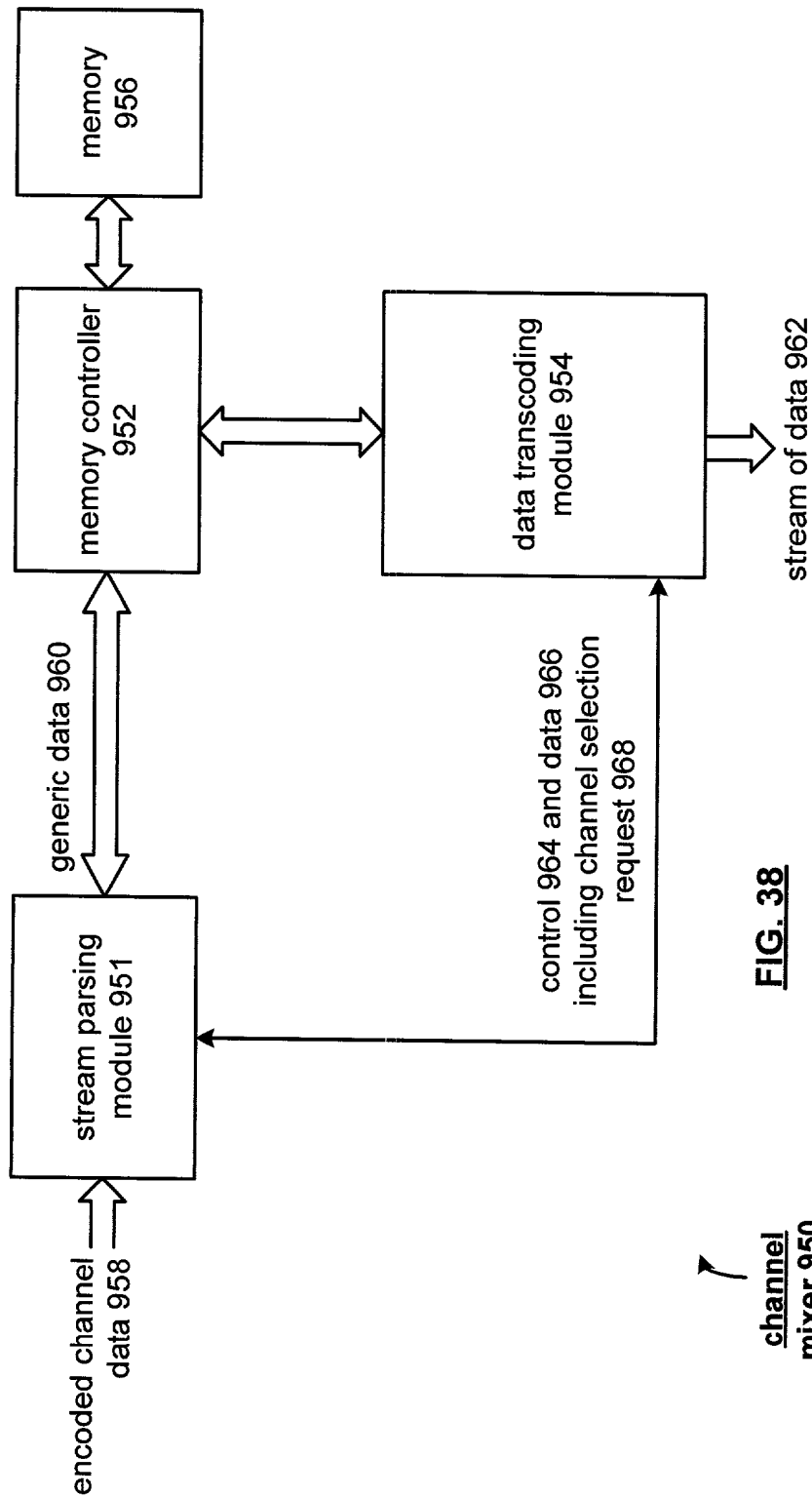
**FIG. 35**



**FIG. 36**

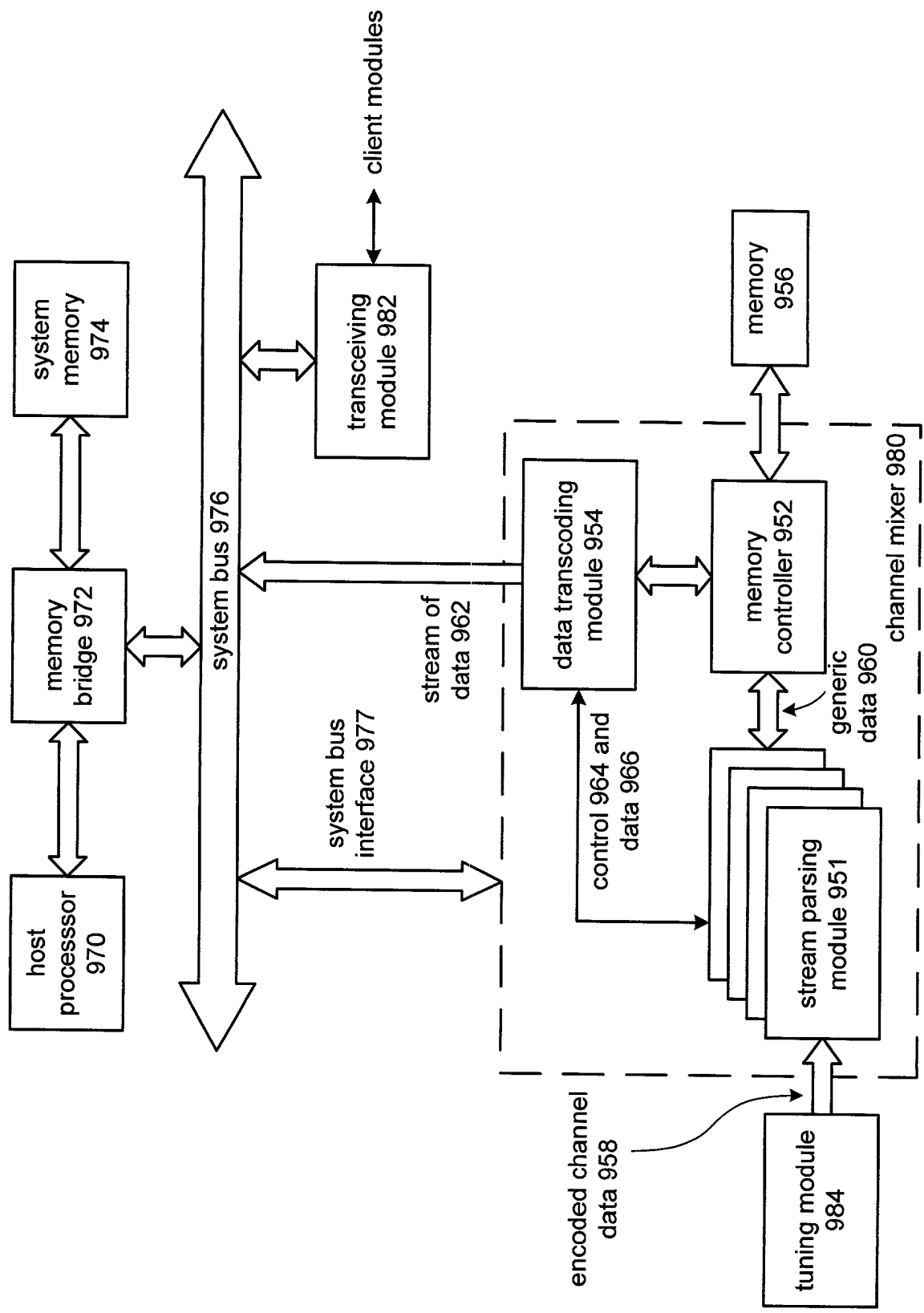


**FIG. 37**



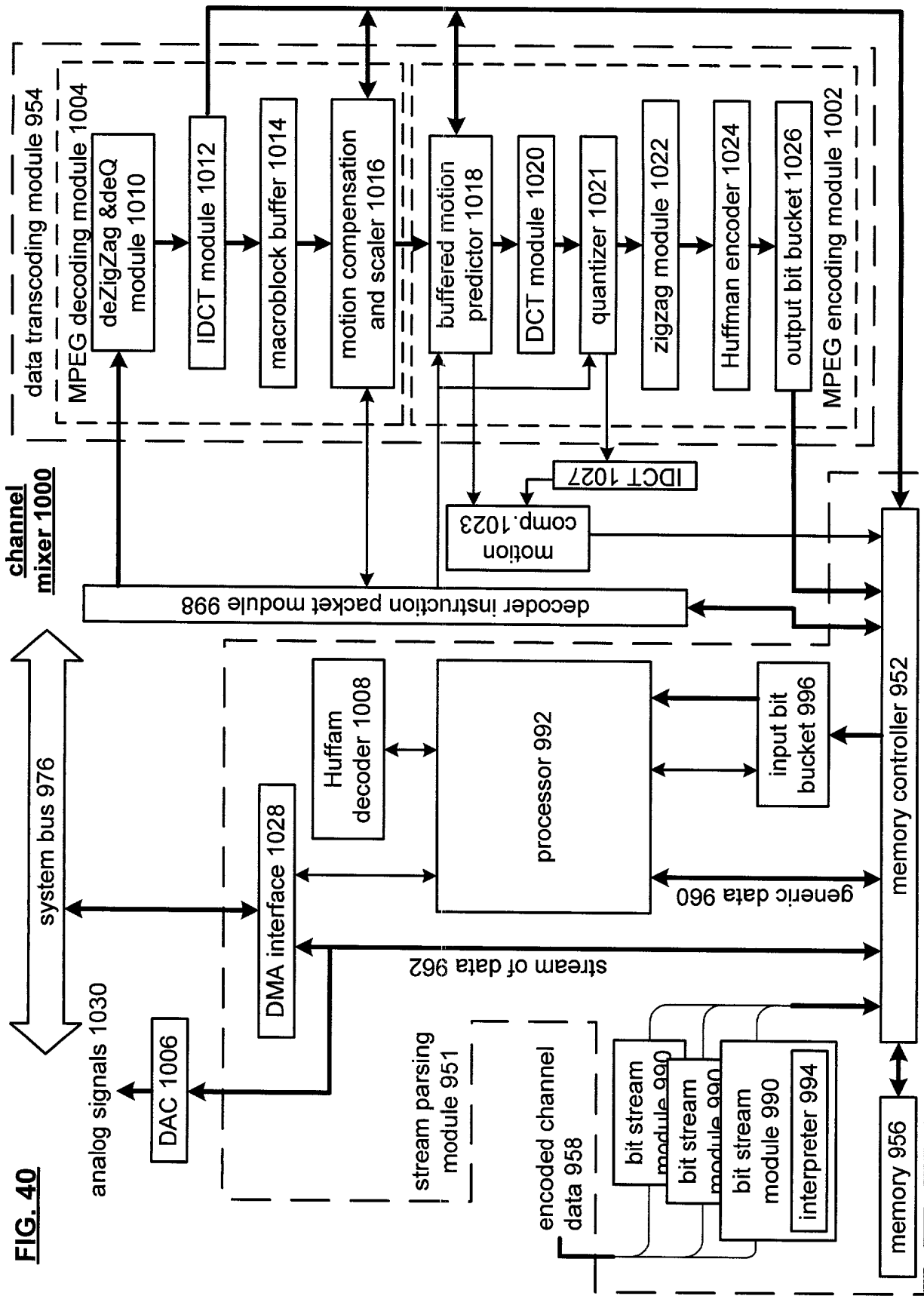
**channel mixer 950**

**FIG. 38**

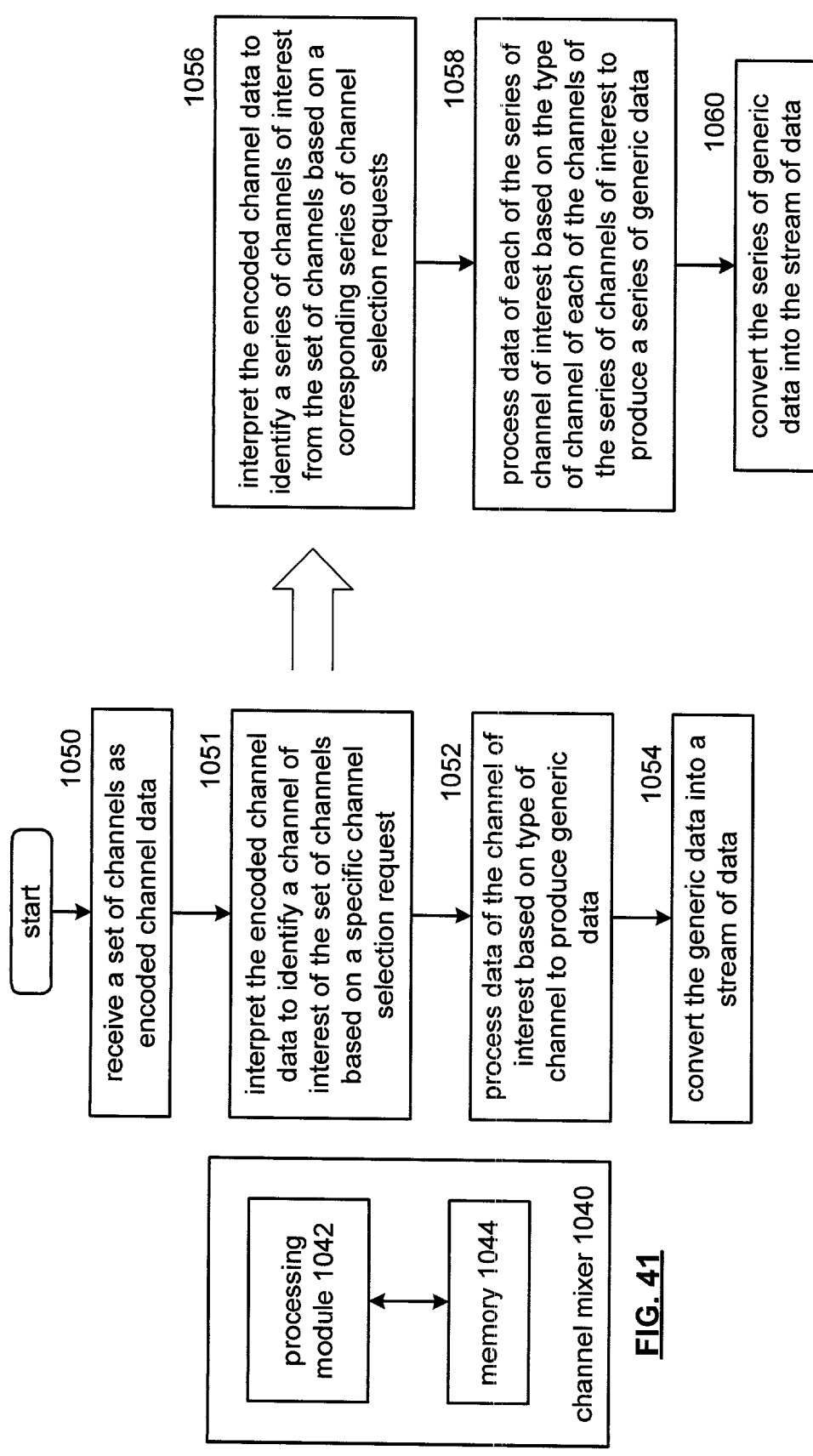


**FIG. 39**

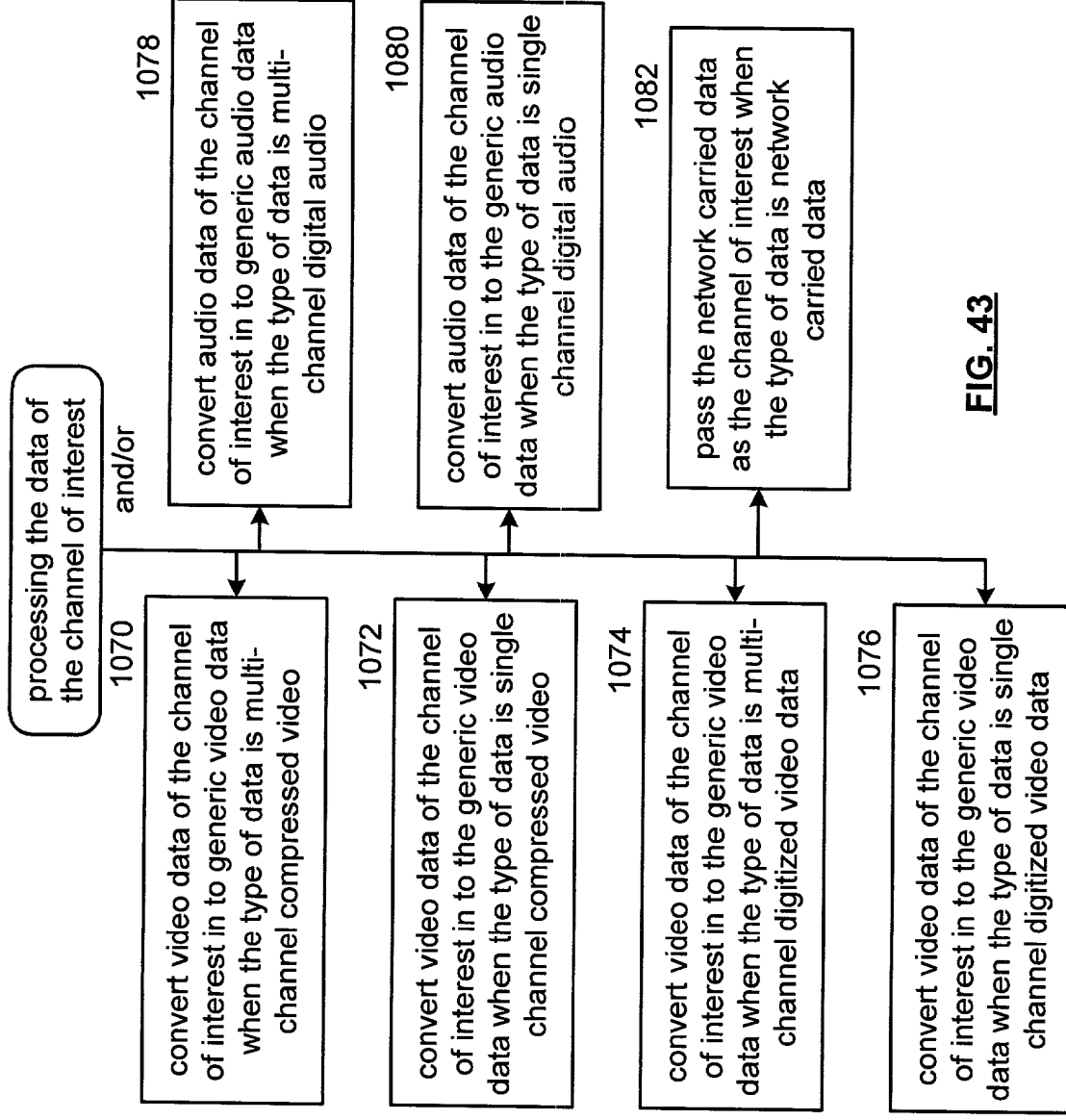




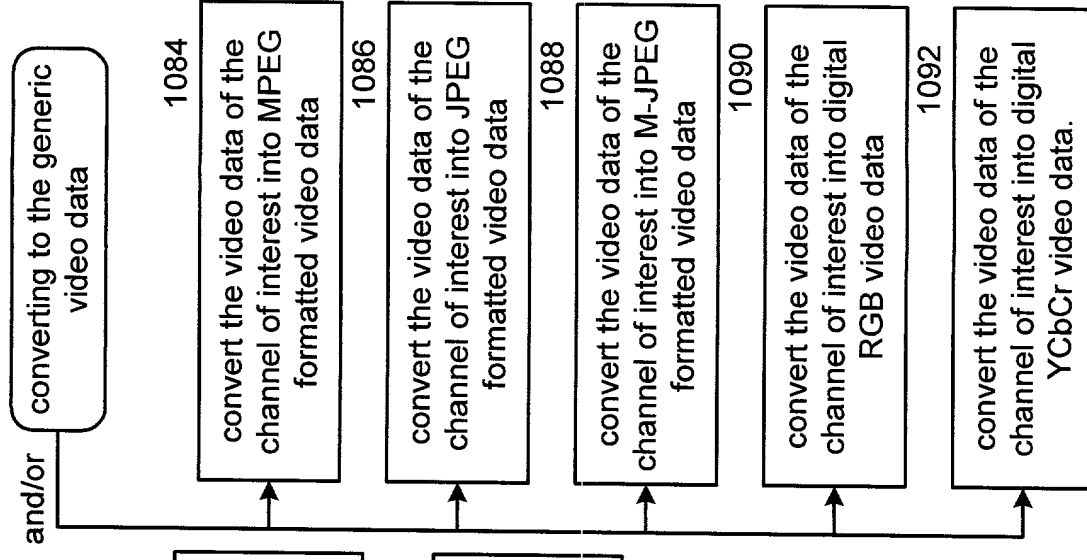
**FIG. 40**



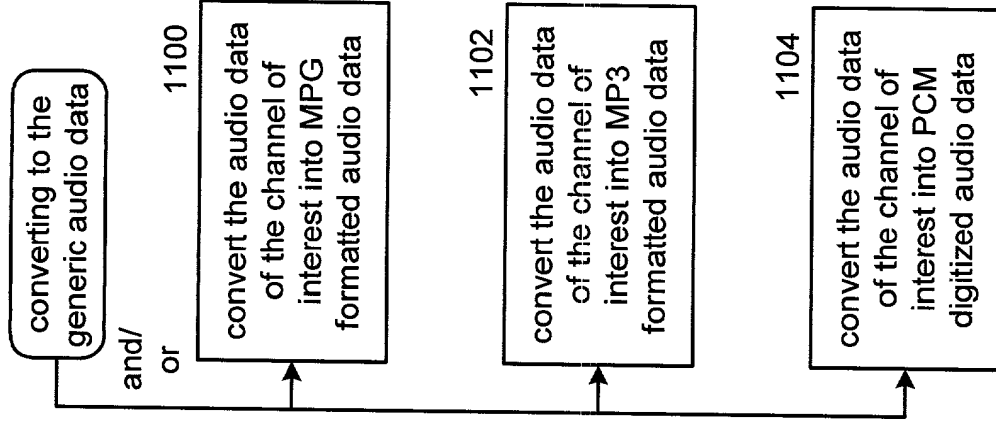
**FIG. 42**



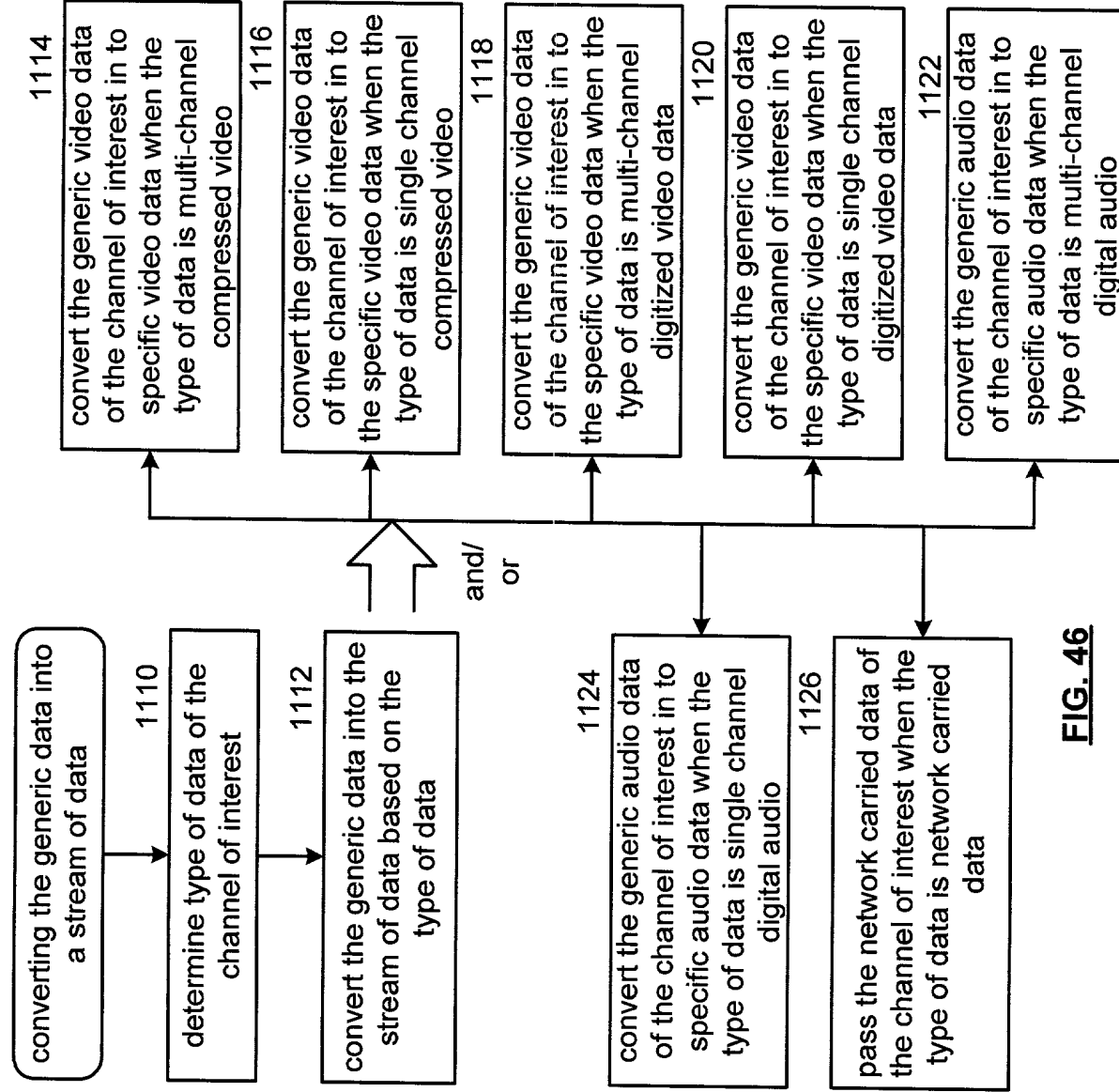
**FIG. 43**



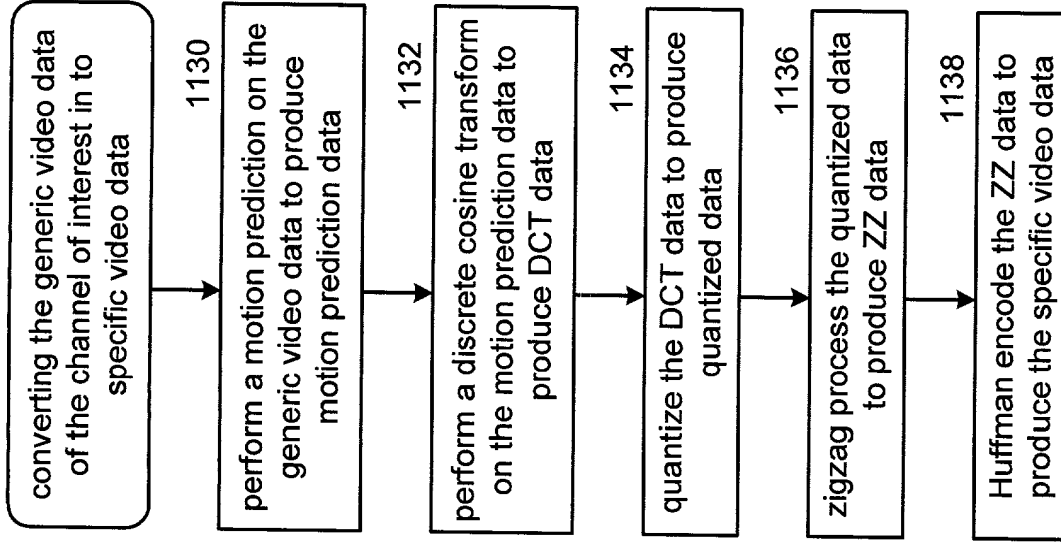
**FIG. 44**



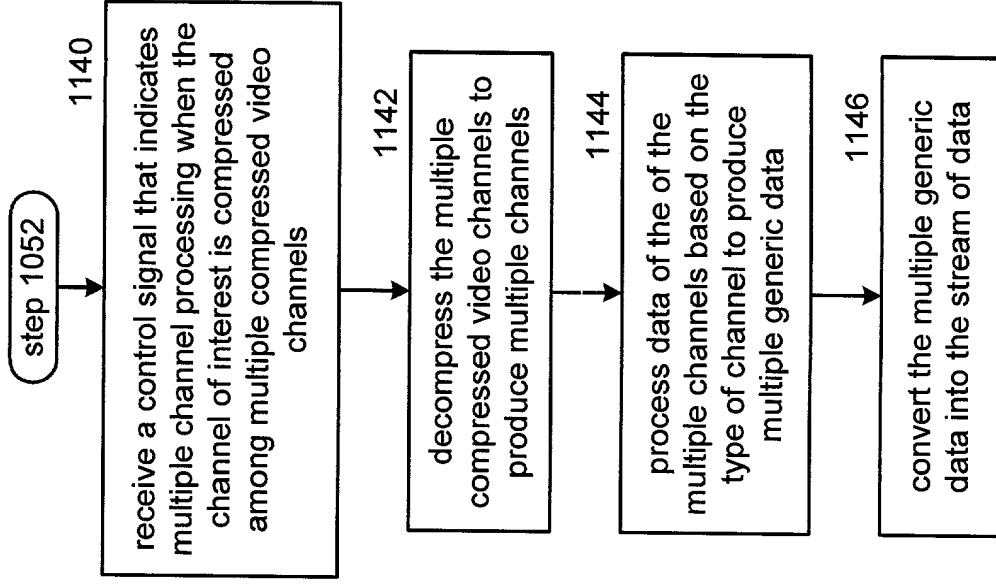
**FIG. 45**



**FIG. 46**

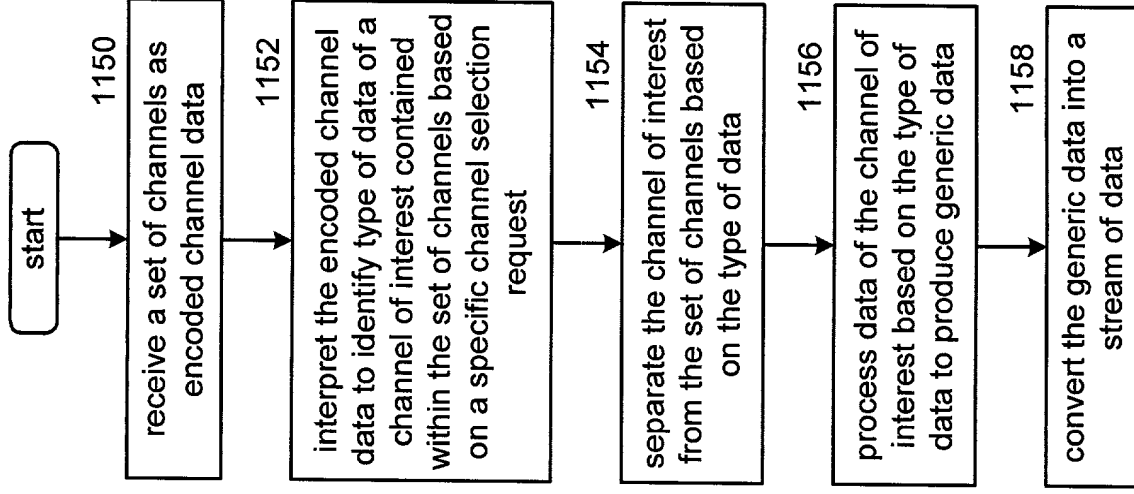


**FIG. 47**



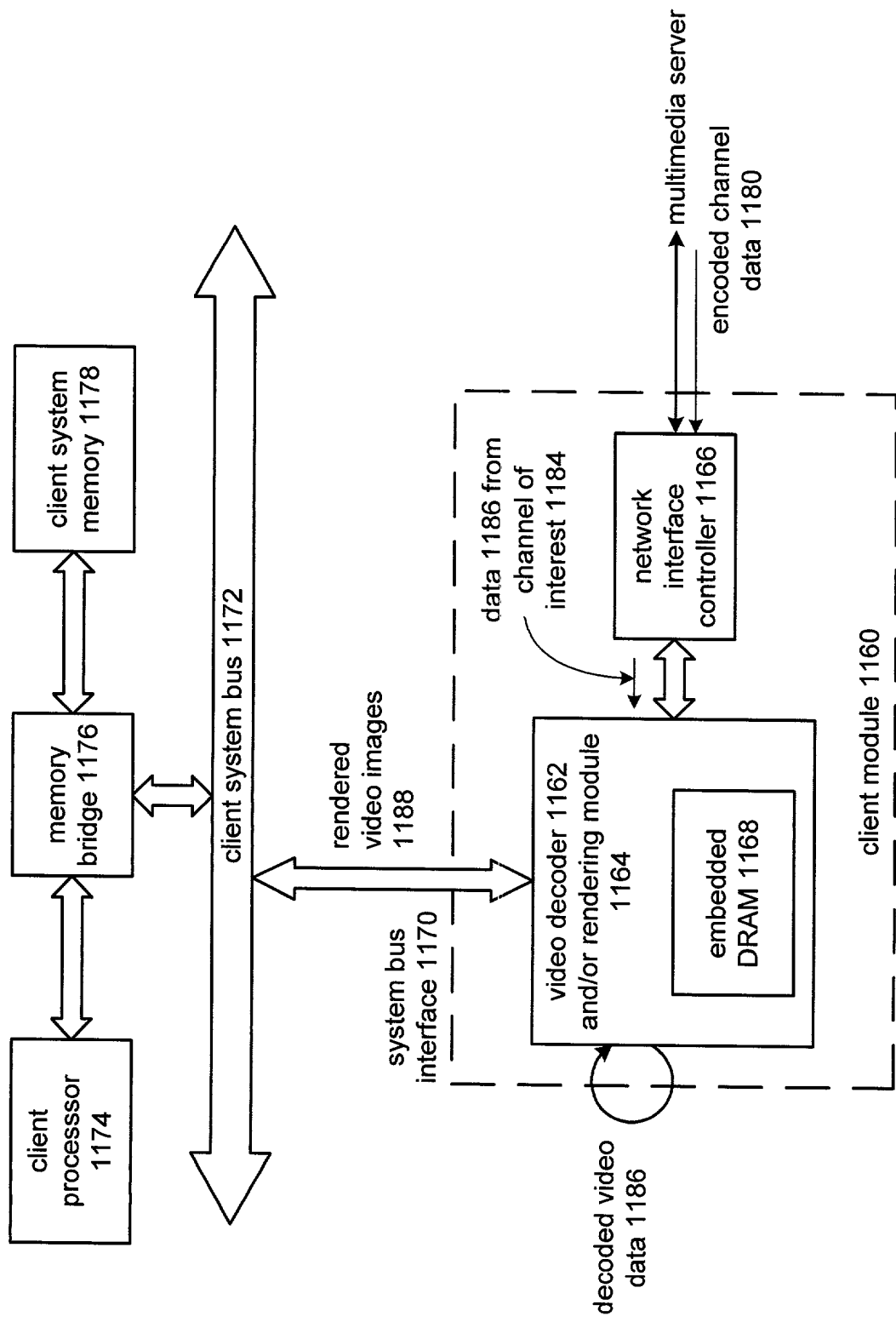
**FIG. 48**

FIG. 49 is a flowchart illustrating a method for processing channel data. The method starts at a start block, then proceeds to block 1150, which is labeled "receive a set of channels as encoded channel data". From block 1150, the method proceeds to block 1152, which is labeled "interpret the encoded channel data to identify type of data of a channel of interest contained within the set of channels based on a specific channel selection request". From block 1152, the method proceeds to block 1154, which is labeled "separate the channel of interest from the set of channels based on the type of data". From block 1154, the method proceeds to block 1156, which is labeled "process data of the channel of interest based on the type of data to produce generic data". From block 1156, the method proceeds to block 1158, which is labeled "convert the generic data into a stream of data".

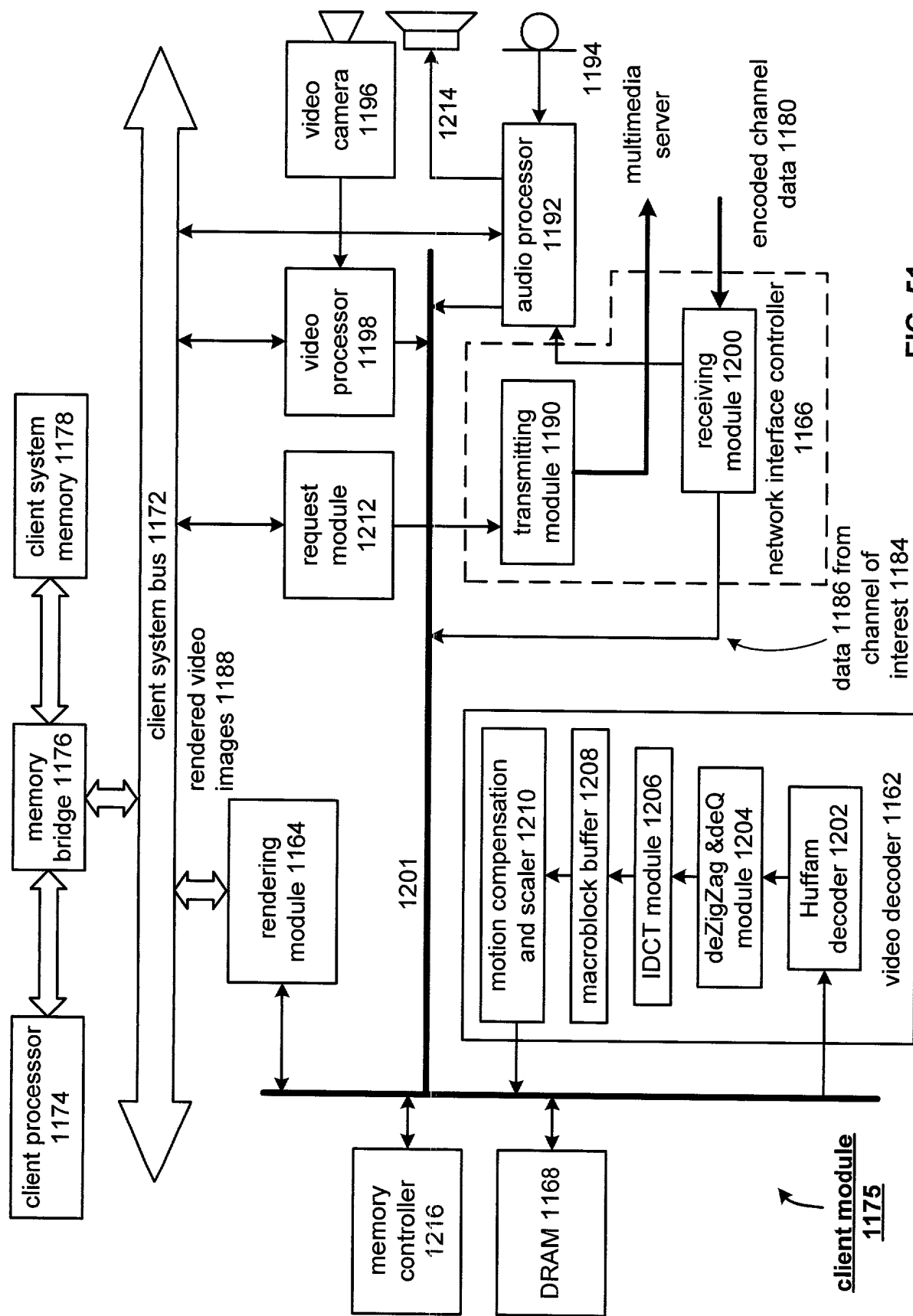


**FIG. 49**

FIG. 50 is a block diagram of a client system 1170 in accordance with an embodiment of the present invention. The client system 1170 includes a client processor 1174, a memory bridge 1176, a client system memory 1178, and a client system bus 1172. The client processor 1174 is connected to the memory bridge 1176 via a system bus interface 1170. The memory bridge 1176 is connected to the client system memory 1178 via a system bus interface 1170. The client system bus 1172 is connected to the memory bridge 1176 and the client system memory 1178. The client system bus 1172 is also connected to a video decoder and/or rendering module 1164 and a network interface controller 1166. The video decoder and/or rendering module 1164 includes an embedded DRAM 1168. The network interface controller 1166 is connected to a multimedia server via an encoded channel data 1180. The video decoder and/or rendering module 1164 is connected to the network interface controller 1166 via a data channel of interest 1184. The video decoder and/or rendering module 1164 outputs rendered video images 1188 to the network interface controller 1166. The network interface controller 1166 outputs encoded channel data 1180 to the multimedia server. The video decoder and/or rendering module 1164 also receives decoded video data 1186 from the network interface controller 1166.



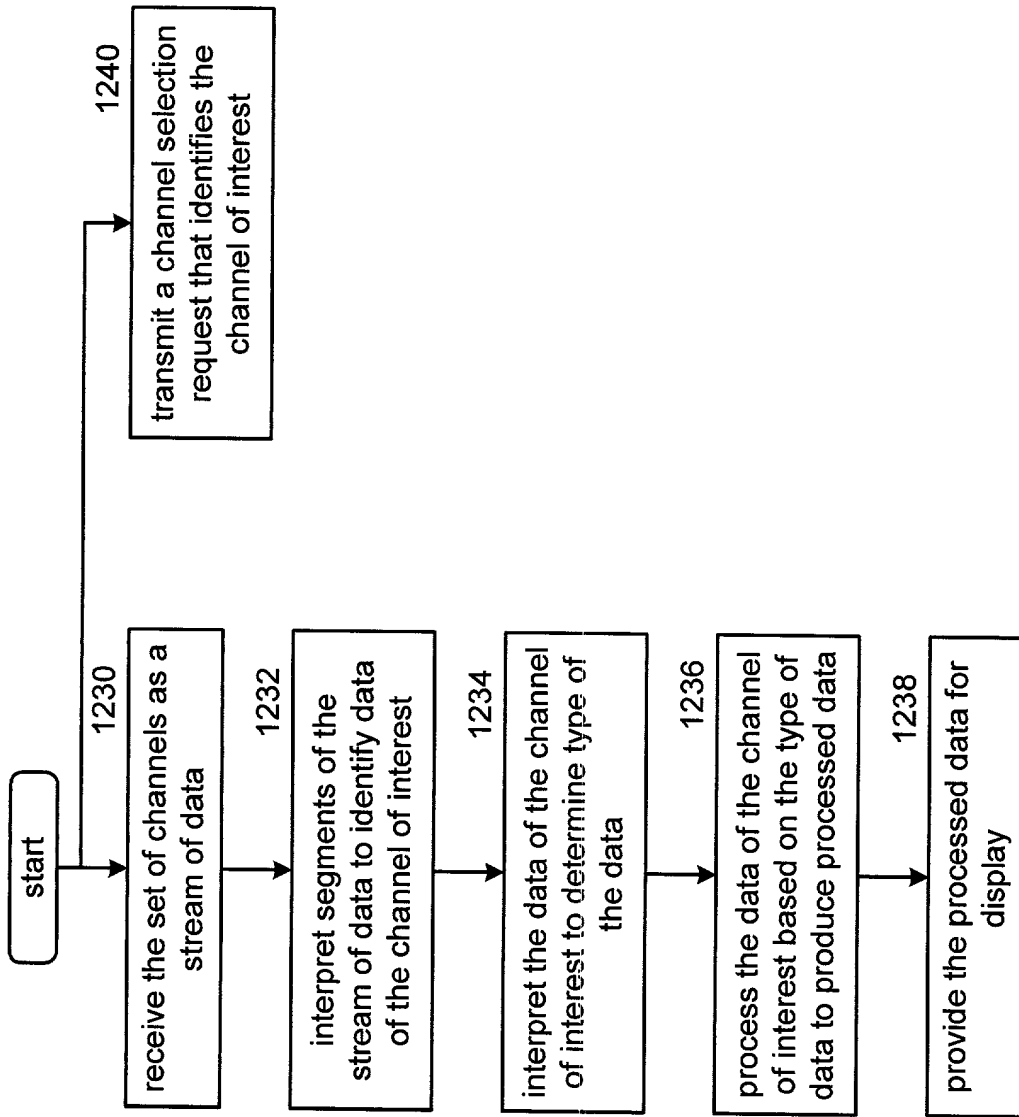
**FIG. 50**



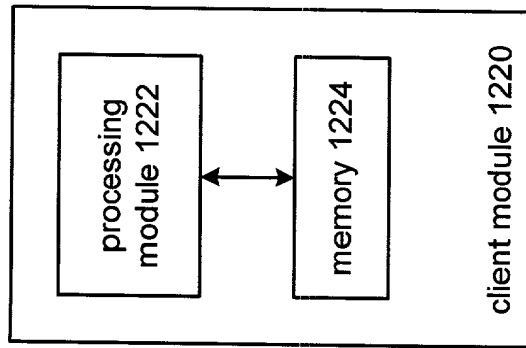
**FIG. 51**



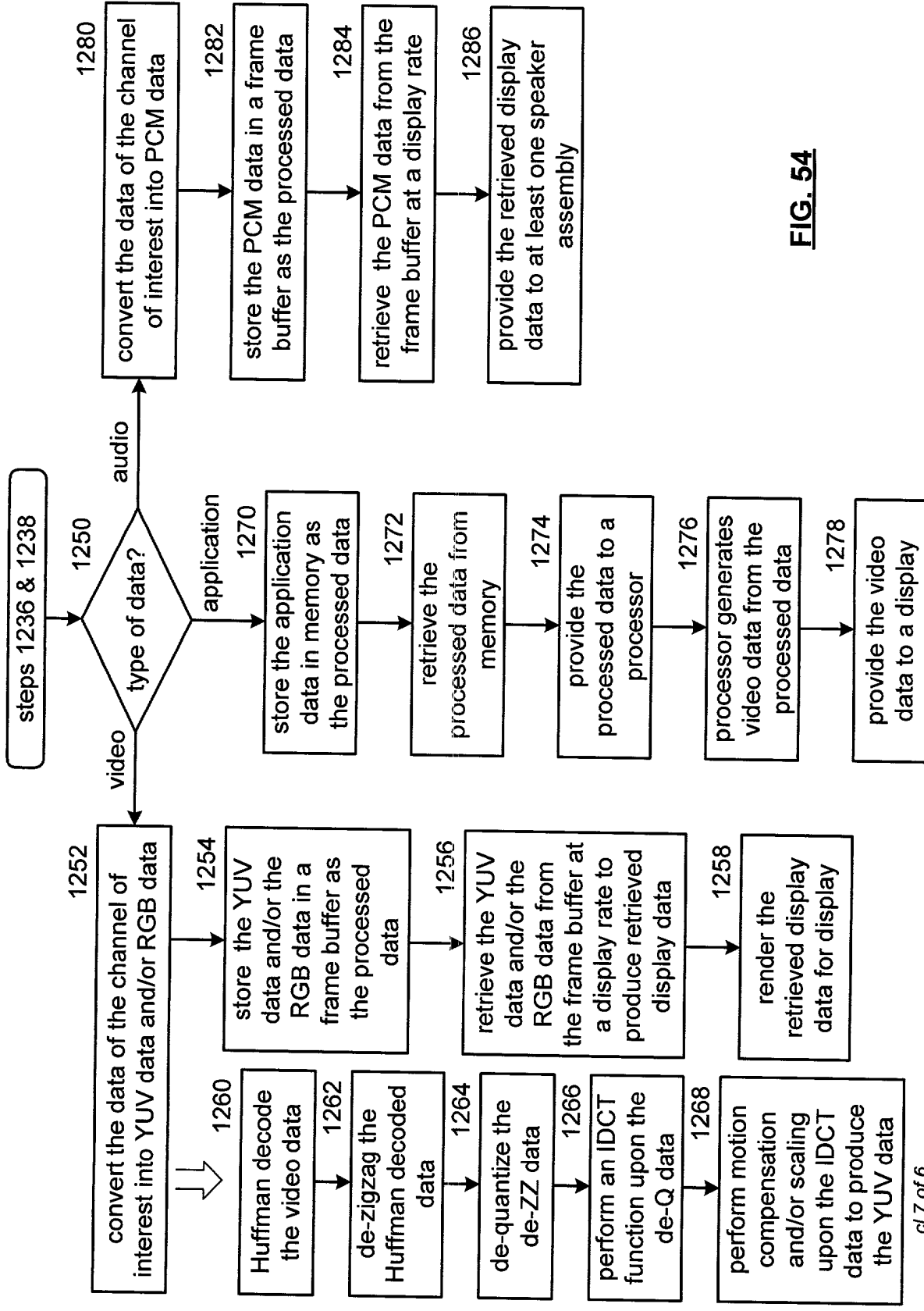
FIG. 52 is a block diagram of a client module 1220. The client module 1220 includes a processing module 1222 and a memory 1224. The processing module 1222 is connected to the memory 1224 via a bidirectional arrow. The client module 1220 is connected to a network 1200 via a bidirectional arrow. The network 1200 is connected to a server 1210 via a bidirectional arrow. The server 1210 is connected to a database 1230 via a bidirectional arrow. The database 1230 is connected to a user interface 1240 via a bidirectional arrow. The user interface 1240 is connected to a display 1250 via a bidirectional arrow. The display 1250 is connected to a printer 1260 via a bidirectional arrow. The printer 1260 is connected to a scanner 1270 via a bidirectional arrow. The scanner 1270 is connected to a fax machine 1280 via a bidirectional arrow. The fax machine 1280 is connected to a telephone 1290 via a bidirectional arrow. The telephone 1290 is connected to a modem 1300 via a bidirectional arrow. The modem 1300 is connected to a router 1310 via a bidirectional arrow. The router 1310 is connected to a switch 1320 via a bidirectional arrow. The switch 1320 is connected to a hub 1330 via a bidirectional arrow. The hub 1330 is connected to a bridge 1340 via a bidirectional arrow. The bridge 1340 is connected to a gateway 1350 via a bidirectional arrow. The gateway 1350 is connected to a firewall 1360 via a bidirectional arrow. The firewall 1360 is connected to a proxy server 1370 via a bidirectional arrow. The proxy server 1370 is connected to a load balancer 1380 via a bidirectional arrow. The load balancer 1380 is connected to a web server 1390 via a bidirectional arrow. The web server 1390 is connected to an application server 1400 via a bidirectional arrow. The application server 1400 is connected to a database server 1410 via a bidirectional arrow. The database server 1410 is connected to a backup server 1420 via a bidirectional arrow. The backup server 1420 is connected to a disaster recovery server 1430 via a bidirectional arrow. The disaster recovery server 1430 is connected to a recovery server 1440 via a bidirectional arrow. The recovery server 1440 is connected to a restore server 1450 via a bidirectional arrow. The restore server 1450 is connected to a backup server 1460 via a bidirectional arrow. The backup server 1460 is connected to a disaster recovery server 1470 via a bidirectional arrow. The disaster recovery server 1470 is connected to a recovery server 1480 via a bidirectional arrow. The recovery server 1480 is connected to a restore server 1490 via a bidirectional arrow. The restore server 1490 is connected to a backup server 1500 via a bidirectional arrow.



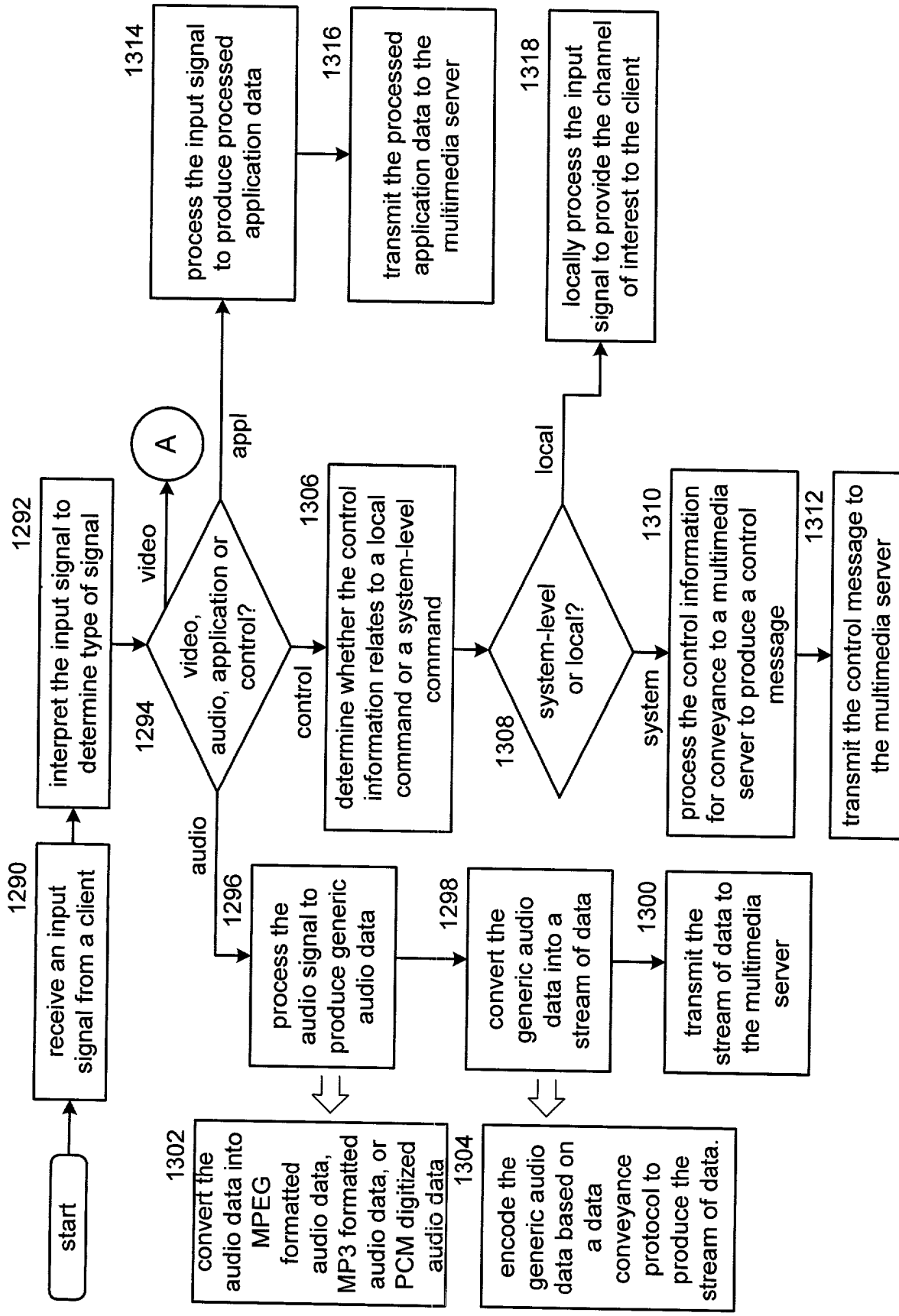
**FIG. 53**



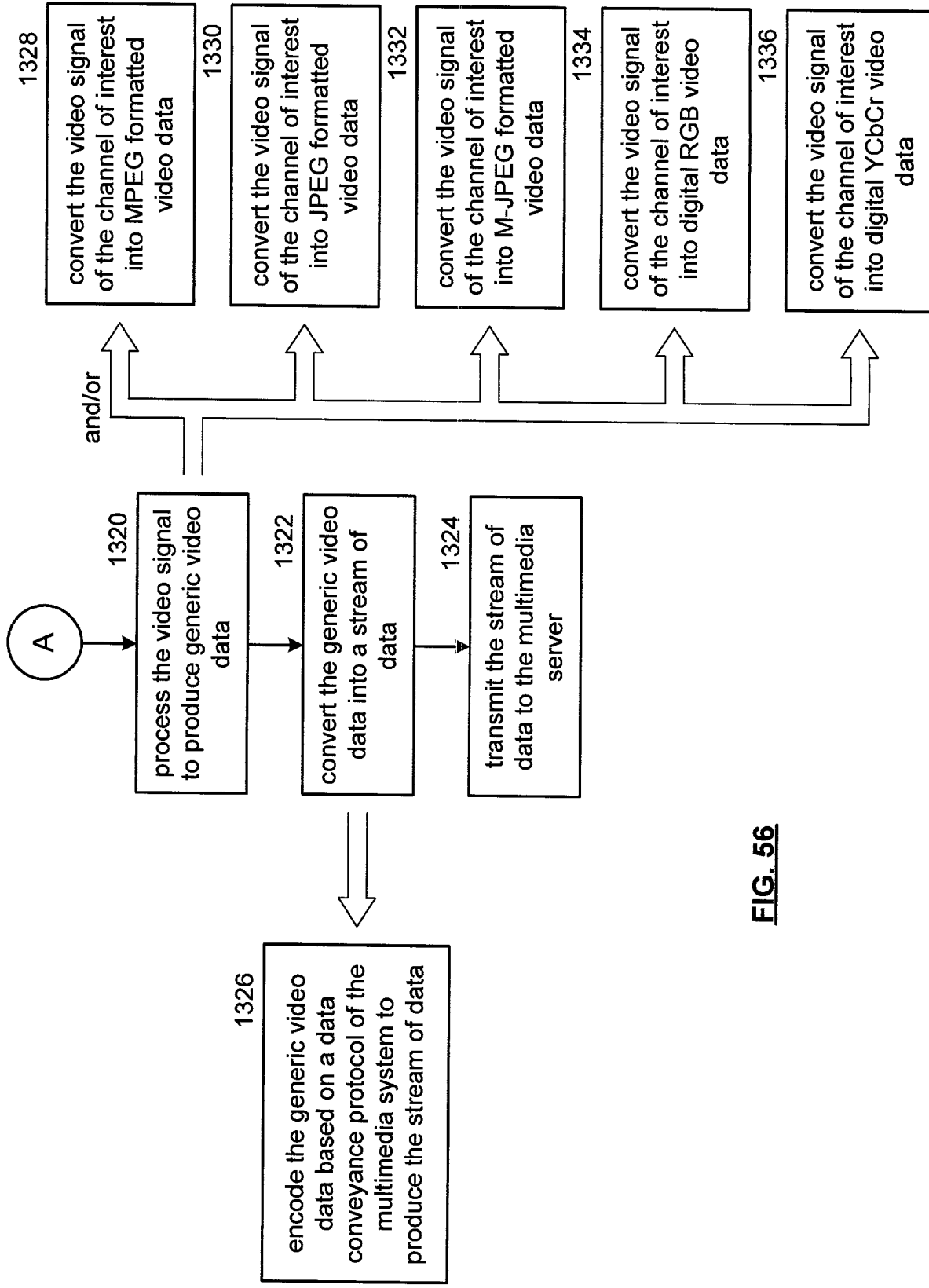
**FIG. 52**



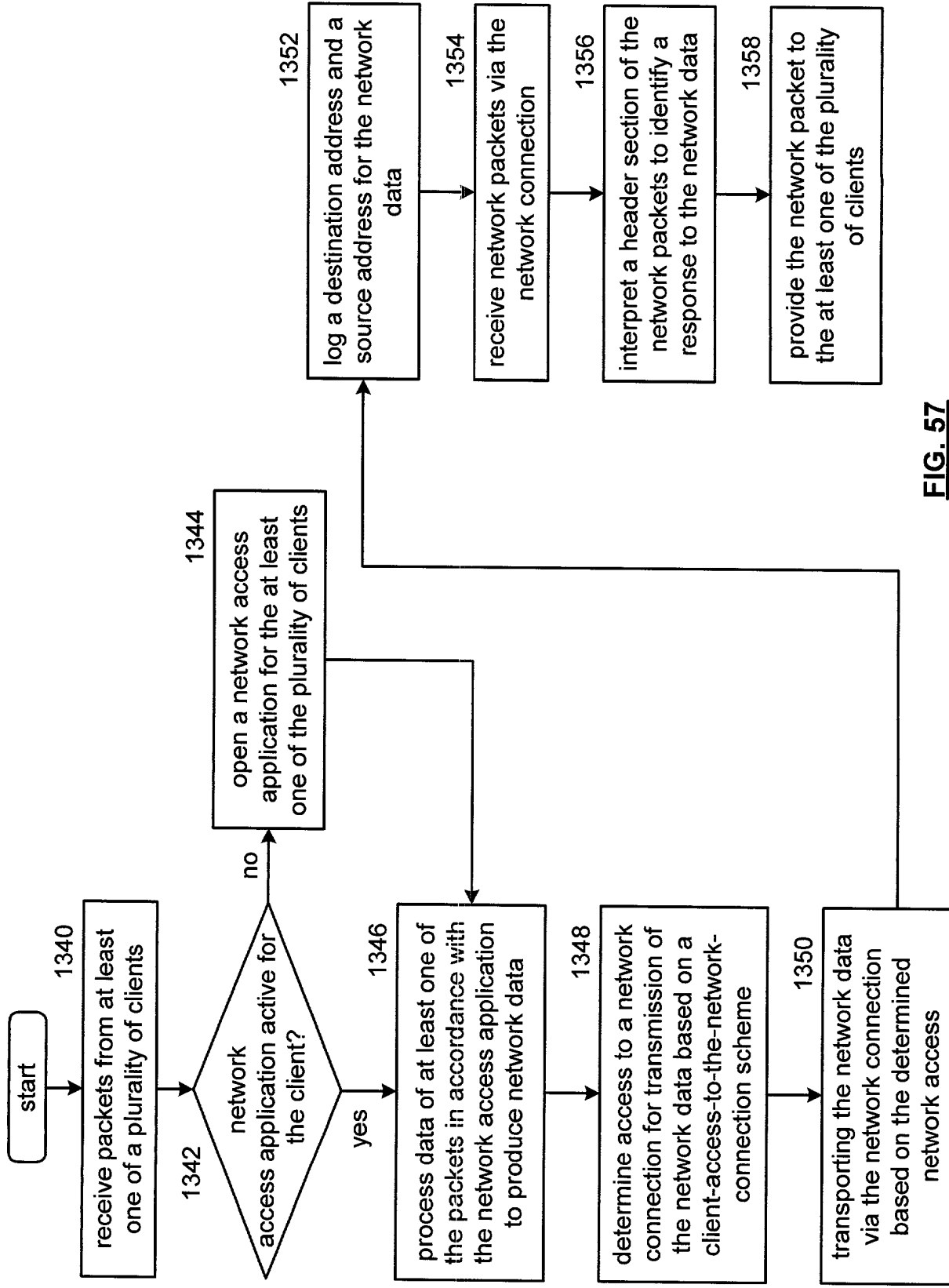
**FIG. 54**



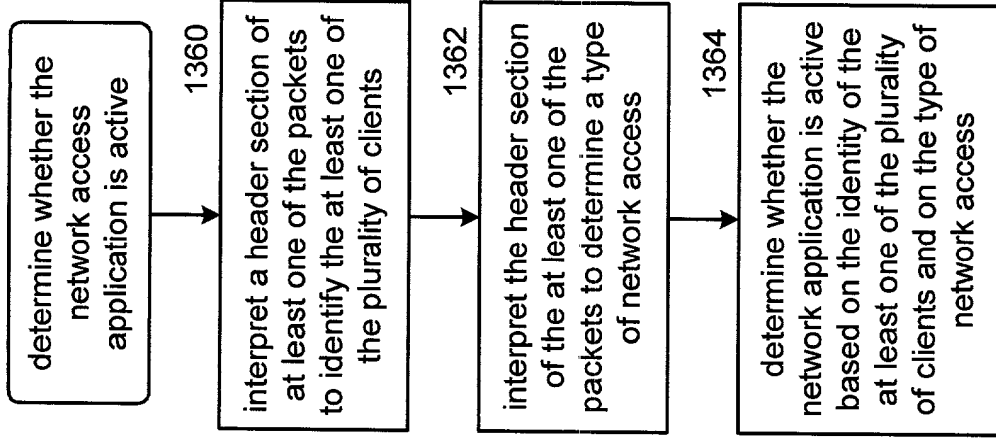
**FIG. 55**



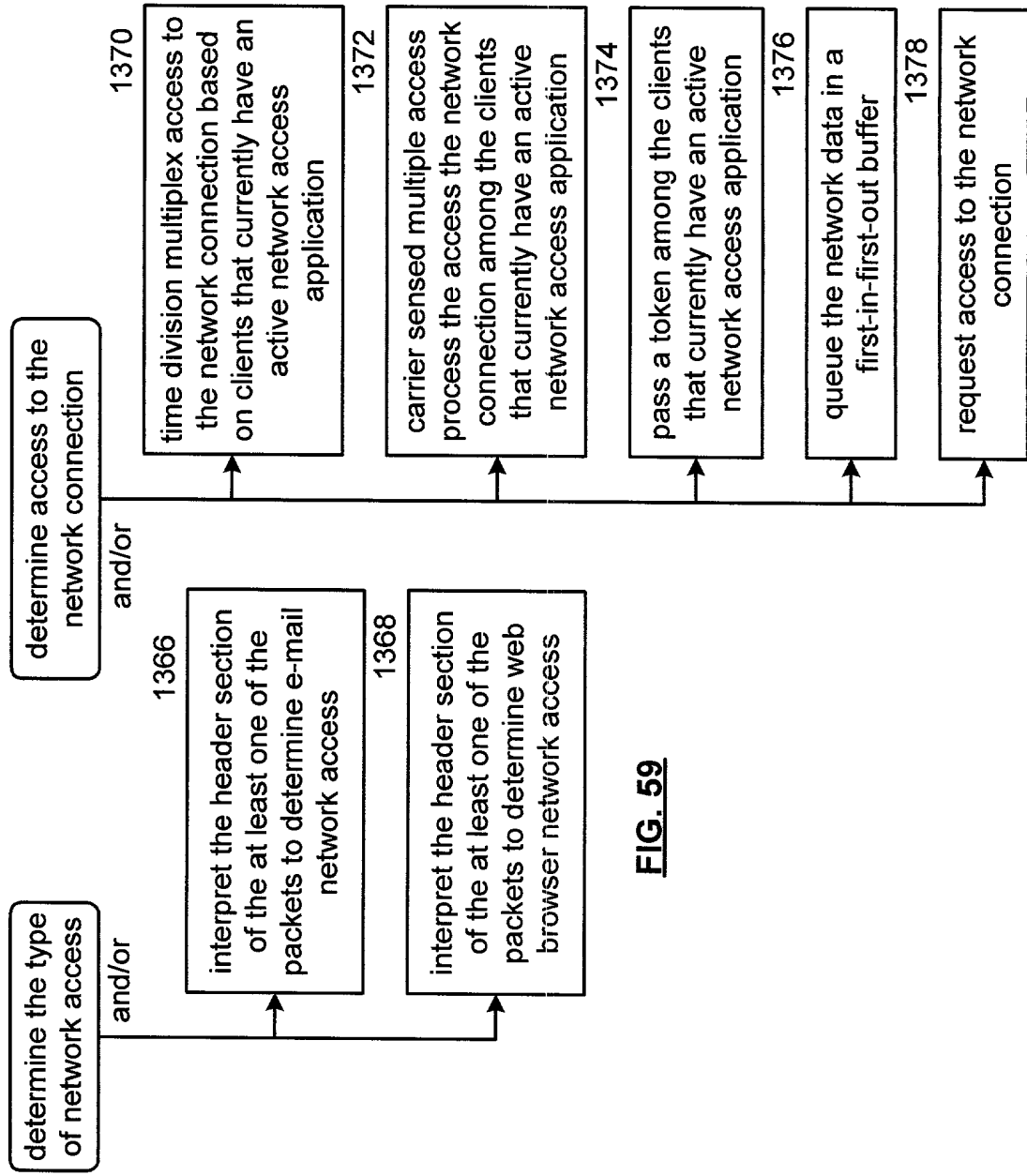
**FIG. 56**



**FIG. 57**

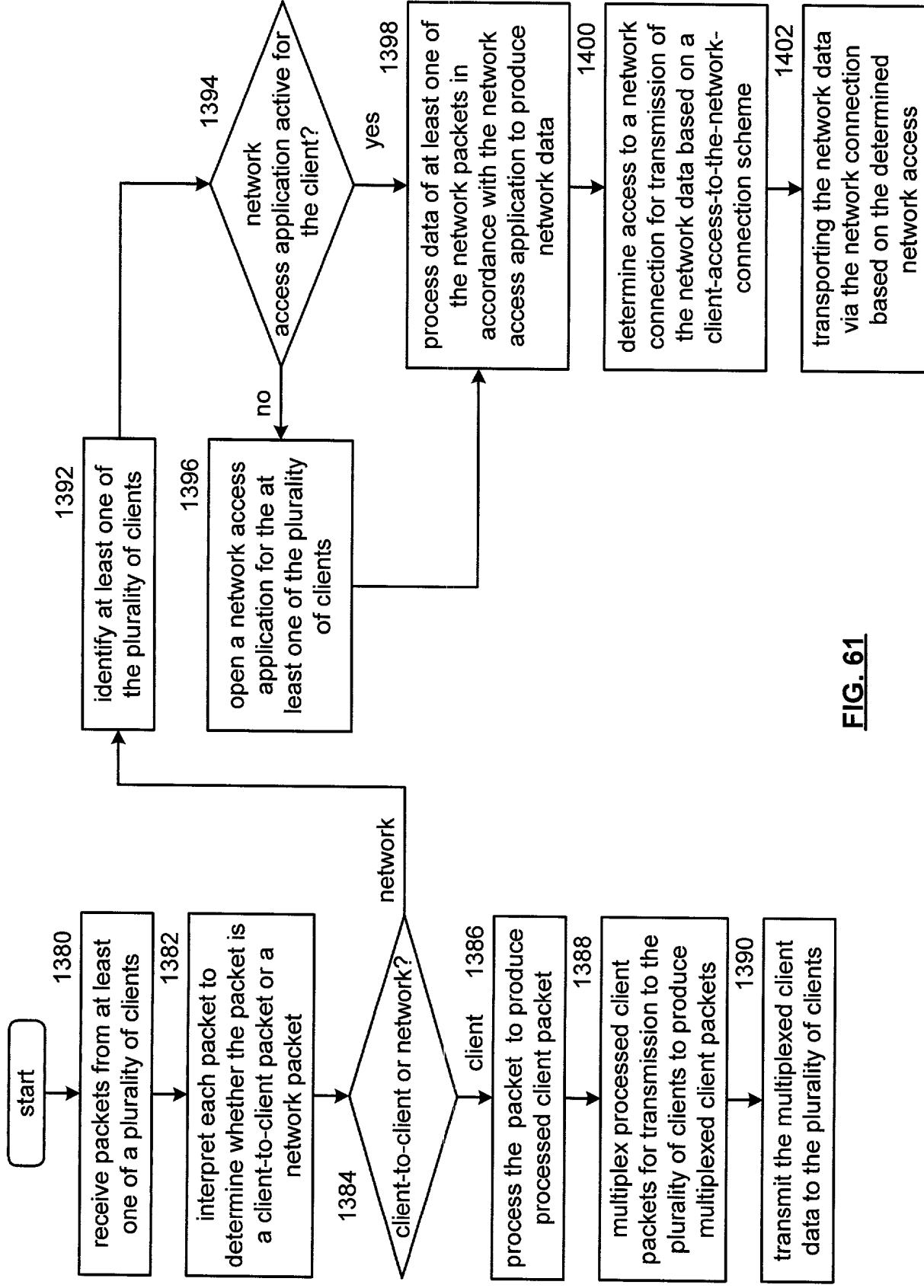


**FIG. 58**

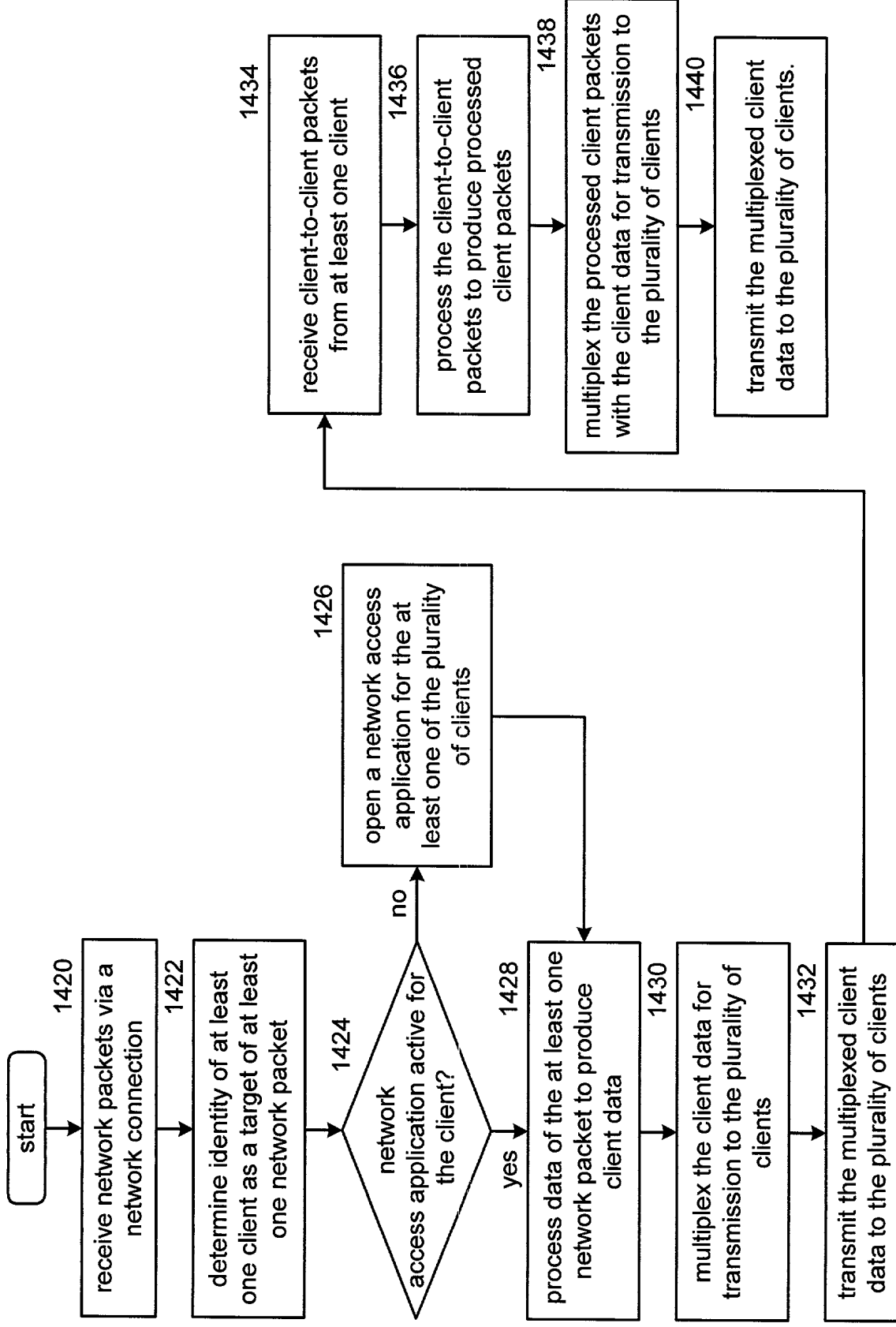


**FIG. 59**

**FIG. 60**

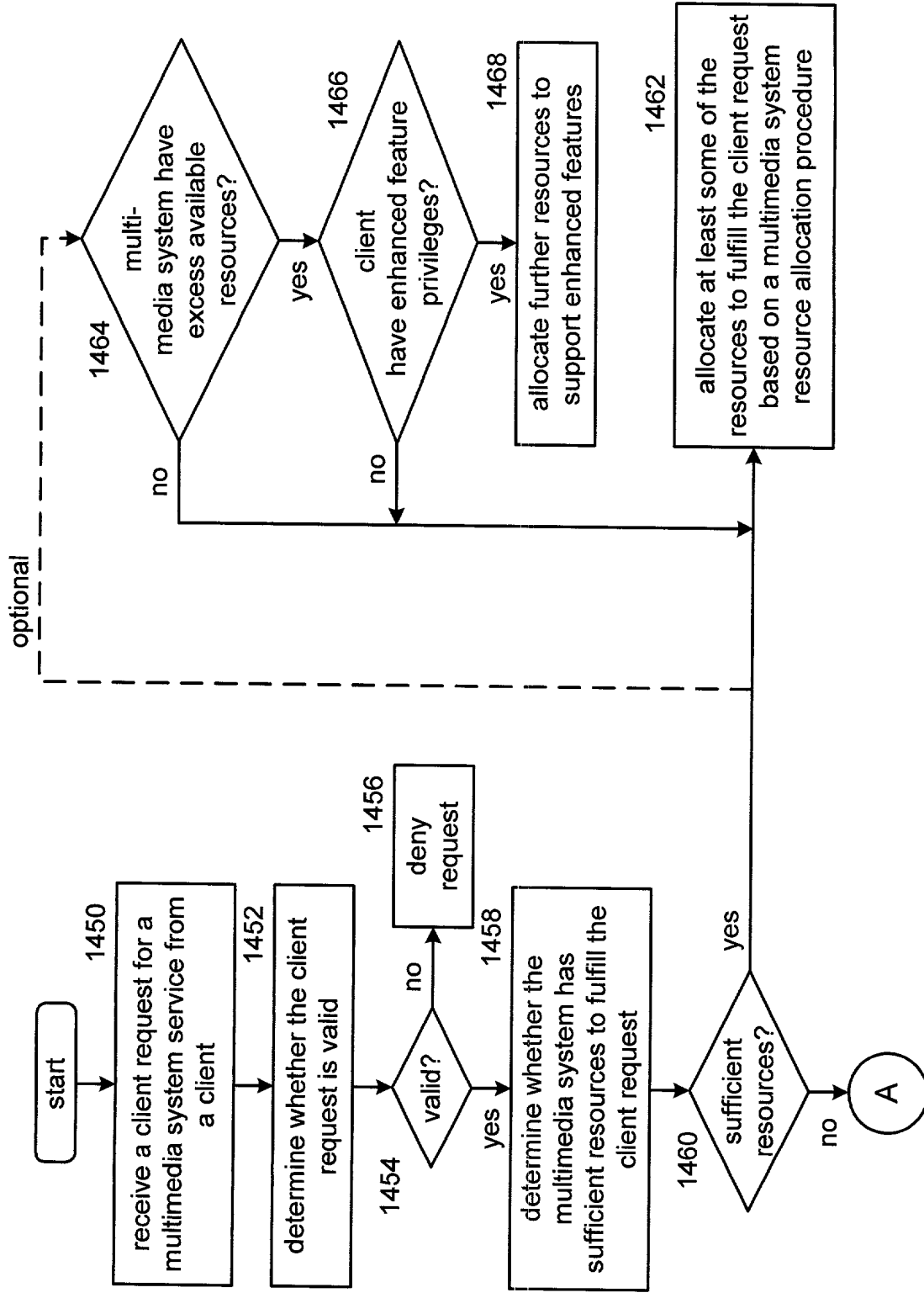


**FIG. 61**

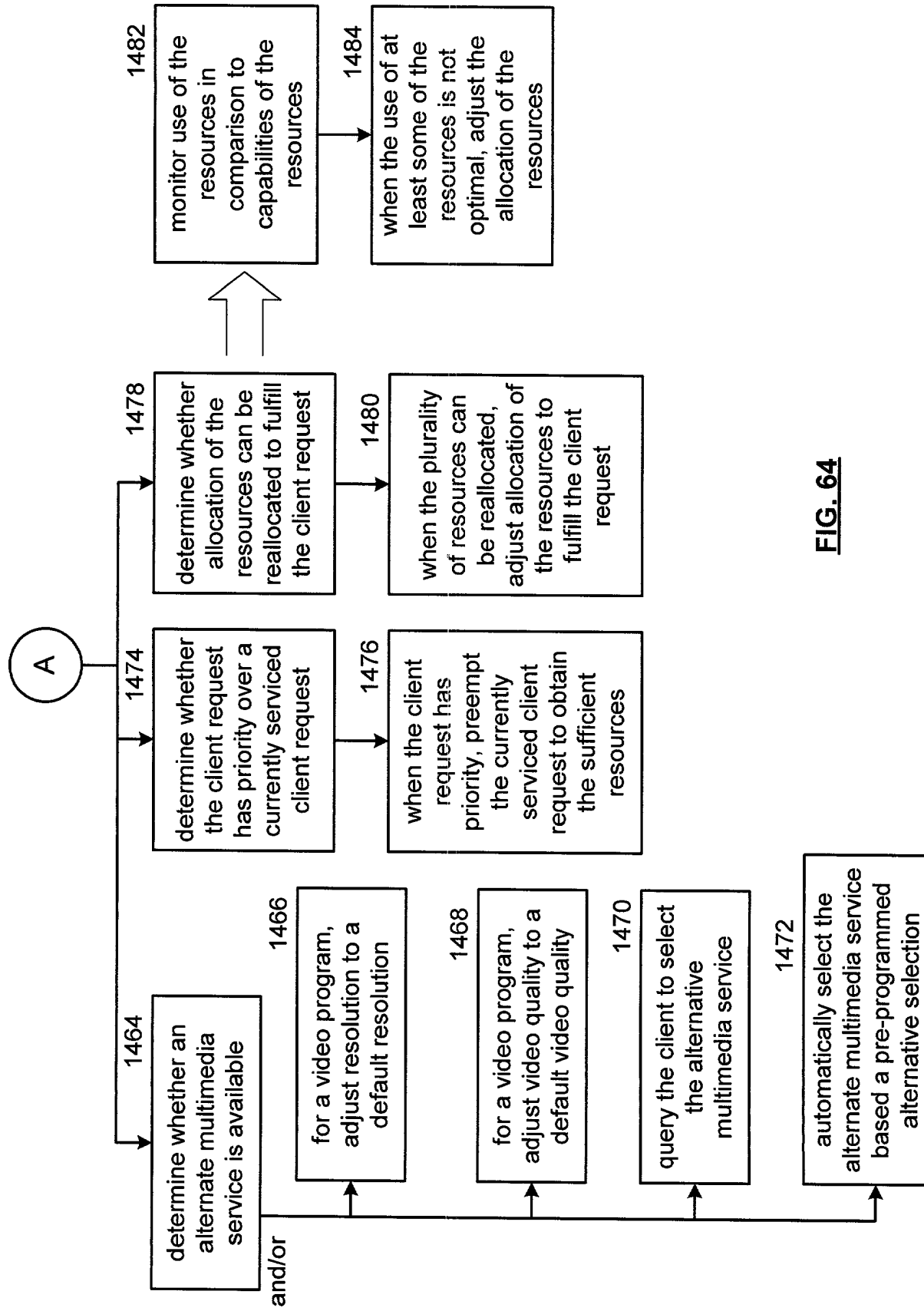


**FIG. 62**

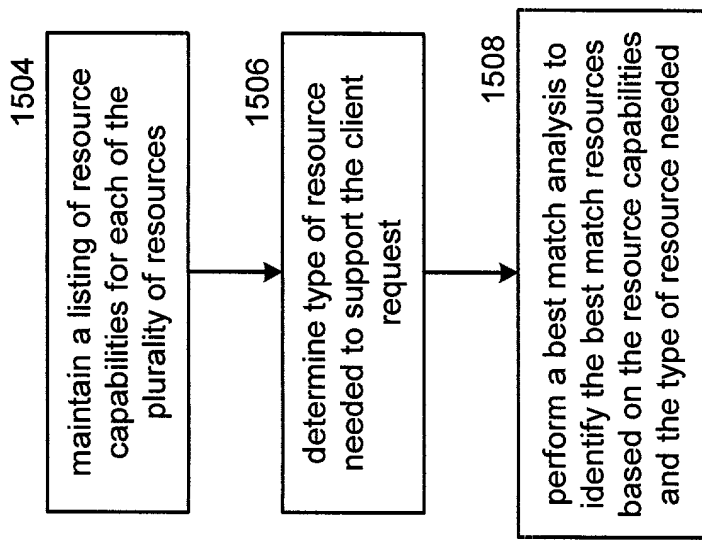
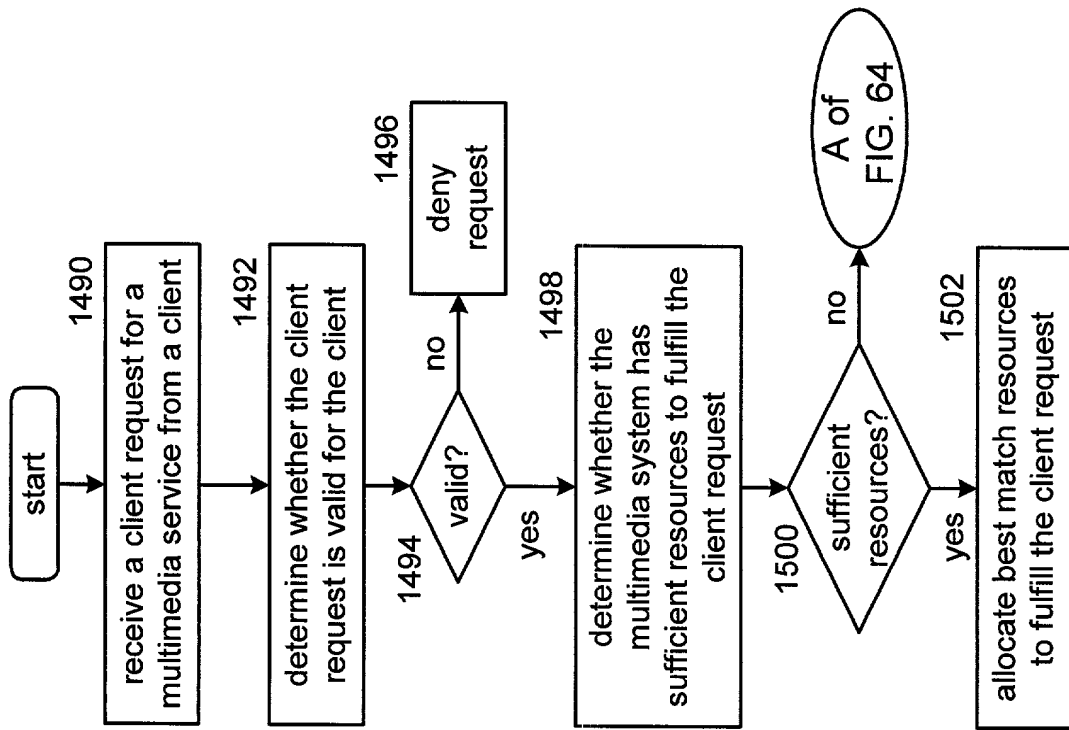




**FIG. 63**



**FIG. 64**



**FIG. 65**